



Managing Depression

in **Primary Care** in the **Caribbean**

© 2010

CARIBBEAN HEALTH RESEARCH COUNCIL

ST. AUGUSTINE, TRINIDAD & TOBAGO

<http://www.chrc-caribbean.org>

Disclaimer

These are general guidelines only and may not apply in the case of any particular individual patient. They should be applied bearing in mind the local situation. The health care worker should always use his/her clinical judgement and expertise.

Duality of Interest

No duality of interest was identified.

Contents

PREFACE	v
ACKNOWLEDGEMENTS	vii
SECTION I: INTRODUCTION	1
• Depression - An Overview.....	3
• Epidemiology.....	5
• Natural History and Course.....	8
SECTION II: CLASSIFICATION AND DIAGNOSTIC CRITERIA	11
• Depression.....	13
• Bipolar Depression.....	16
• Criteria for Major Depressive Disorder.....	17
SECTION III: SCREENING FOR DEPRESSION	19
• Overview.....	21
• Screening in the Elderly.....	21
• Screening in Children and Adolescents.....	22
• When to Suspect Depression.....	23
• When to Suspect Bipolar Depression.....	24
SECTION IV: EFFECTIVE DELIVERY OF CARE	27
• Requirements for Effective Care.....	29
• The Initial Visit.....	30
• Psychotherapies.....	31
• When to Refer to the Mental Health Team.....	32
• Treatment of Depression.....	32
• Prevention and Reduction of Complications.....	37
• Summary of Key Issues.....	38
REFERENCES	39

LIST OF TABLES

Table 1. Differential Diagnosis of Psychotic vs Non-Psychotic Depression 16

Table 2. Treatment Options 33

Table 3. Common drugs and their maintenance doses for adults.. . . . 35

FIGURE

Guidelines for Screening, Diagnosing and Managing Depression.. . . . 25

PREFACE

The Clinical Guidelines, *Managing Depression in Primary Care in the Caribbean*, were developed to improve the management of patients with depression who present to primary care practitioners. This is to be accomplished through improved diagnostic and monitoring skills; better and more appropriate use of available medications to alleviate symptoms and control the condition over the long term; and involving the patient and his/her family in managing and preventing the condition. These guidelines are especially important since depression in a primary care setting seldom presents with the classic symptoms of the psychiatrically depressed patient.

The Caribbean Health Research Council (CHRC) has been producing Clinical Guidelines for prevalent chronic diseases in the Caribbean since 1995, as it fulfils one of its mandates i.e. to promote evidence based clinical practice in the Caribbean. To date, conditions addressed include Diabetes, Hypertension and Asthma. Indeed, these three Guidelines have been recently revised to ensure that practitioners in the Caribbean remain up-to-date with recent research findings and international best practices.

As was the case with the other CHRC Clinical Guidelines, *Managing Depression in Primary Care in the Caribbean* was developed to take into account the culture, economic situation and health care systems of the Caribbean while still ensuring that international best practices are applied to patient care.

The process for the development of the Guidelines was as follows:

- An expert workshop was convened with leading psychiatrists from a number of Caribbean countries. This was chaired by Prof. Gerard A. Hutchinson, the project team leader with overall responsibility for the development of the Guidelines.
- Preparation of the various sections of the Guidelines.
- Before the document was finalized, a draft was disseminated to a wide cross-section of stakeholders for comment, including the Chief Medical Officers from 19 Caribbean countries and the Caribbean College of Family Physicians, *inter alia*.
- Comments were incorporated and the Guidelines finalized.

Preface

We expect that the utilization of these clinical guidelines to manage depression by primary care practitioners in the Caribbean would result in a significant improvement in the quality of life of persons who are affected by this condition. The inclusive approach to its development also facilitates widespread acceptance in both the public and private sectors.

Donald T. Simeon, PhD
Caribbean Health Research Council
St. Augustine
Trinidad and Tobago

September 2010

ACKNOWLEDGEMENTS

The Caribbean Health Research Council acknowledges with appreciation the contribution of several persons to the successful development of these Guidelines to manage Depression in Primary Care in the Caribbean. In particular:

- Prof. Gerard Hutchinson for his exemplary leadership in seeing the project through to the end, from its conceptualization to the final edits.
- Guidelines Committee members and other key Regional experts: Drs Nelleen Baboolal, Rohan Maharaj, Hari Maharajh, Indar Ramthahal, and Sandra Reid from Trinidad and Tobago, Prof. Fred Hickling and Dr. Wendel Abel from Jamaica, Drs. Maisha Emmanuel and Shirley Alleyne from Barbados, Dr. Amrie Morris from St. Vincent and the Grenadines, and Dr. June Samuels from the British Virgin Islands for their critical professional inputs.
- Chief Medical Officers of the 19 CHRC member countries for their support, inputs and endorsement of the Guidelines
- Caribbean College of Family Physicians for key contributions.
- Ms Tonia Robinson who acted as Secretary to the Guidelines Committee.



Introduction

Depression – An Overview

Major Depressive Disorder is a global health problem that may have a varied presentation coloured by socio-cultural and other factors. It is most often experienced as a painful, subjective mood state characterized by pervasive feelings of sadness and/or irritability, decreased interest in previously pleasurable activities, discouragement, loneliness, worthlessness and isolation. This mood state is manifested by unwarranted crying spells, sluggishness of mental and physical activity and suicidal ideation. Sleep, energy and appetite are often affected, so is sexual drive and desire (libido). These vegetative symptoms (libido, sleep and appetite) may be irrationally increased or severely diminished but energy is generally decreased and tiredness comes too easily. Perhaps it can best be described as emotional pain accompanying a sense of sadness that seems to be far greater than the context or circumstance in which it occurs. This pain disrupts and profoundly affects the sufferer's view of the value of life and traumatizes those who are closely involved with them (1).

According to the World Health Organisation's Global Burden of Disease Study (2), depression is one of the top five major causes of disability in the world. It causes more disability and greater decrements in health than most other chronic illnesses such as diabetes mellitus, arthritis and angina. This is primarily because only 30% of those afflicted receive treatment. Its chronicity and complications affect both the sufferer and their social networks. It can also be co-morbid with other chronic illnesses, which adds to its overall impact on morbidity and mortality (3). Because it is under-recognised even by those who suffer, it naturally extends to a situation where it is under-diagnosed by those who may be called upon to treat it. It has been reported that the one year prevalence of major depression in a primary care clinic was 10.4%, however, only 15% of these cases were diagnosed by primary care physicians (4). It was however found that there were psychological issues involved in 54% of these cases. Studies in the Caribbean have suggested that depression in primary care among chronic disease patients is more likely in those who are older and of lower socioeconomic status, while for family practice these indicators may be reversed. This means that primary care is not homogeneous and there must be a high index of suspicion for depression (5, 6). There is also a suggestion that primary care physicians tend to initiate treatment for depression when their patients request it thereby underlining the need for physicians to be more aware and sensitive to the presence of this condition (7).

Depression has been described as the archetypal modern disease and straddles an unstable bridge between social conditions and brain biochemistry (1). This makes it difficult for both patients and clinicians to confront its presence with great certainty because sadness is a natural and normal part of the human condition and the precise point at which it becomes pathological and necessitates professional intervention is sometimes unclear. Some critics have argued that in the attempts to make it more recognizable and visible, screening for depression has become too aggressive and this will ultimately result in it being over-diagnosed (8). One of the dangers associated with over-diagnosis is that individuals may begin to feel that all sadness and indeed any suffering is pathological and requires either medication or therapy. It is therefore important to distinguish between normal sadness and pathological depression.

There is no doubt that when the disorder does exist, it is a source of great suffering and disability, and contributes to mortality through suicide, particularly in the young adult and elderly age groups. This explains why depression is estimated to become the second highest cause of disability by 2020 (2). It is estimated that between 30% - 40% of patients with depression receive treatment and not all of those receive the appropriate treatment while roughly half of the people with depression never seek any help at all from any source (3).

Therefore, there must be clear guidelines toward the diagnosis and management of depressive disorders in primary care to ensure that effective interventions occur and referral to specialist mental health services are made appropriately. Resources would then be optimally utilized and health and social costs reduced.

Where there are few or no specialist mental health services available, it is the general medical services that will treat the majority of depressive cases. The value of successful intervention for depression includes diminished morbidity for a range of medical conditions, decreases in the suicide, violence and homicide rates, and more effective utilization of health services. There will also be greater productivity in the society through the reduction of social pathology, improvements in functional performance and improved time utilization for the people whose lives are entwined with those who suffer from depressive disorders. These benefits would suggest that there is sufficient incentive to invest in adequate treatment for depressive disorders.

Epidemiology

Depression is thought to be the most common single entity that brings a patient into the physician's office. The symptom itself is rarely presented directly, because the patient is generally not aware that he/she is depressed. In the primary care setting, depression in fact rarely presents with the classic psychiatric symptoms of sadness or loss of interest (9). By far, the most likely complaints are those of a physical nature—fatigue, lack of interest, sleep disturbance, appetite disturbance, bowel disturbance, irritability, lack of sexual interest and performance or some other somatic complaint.

It has been reported in the United Kingdom that depression has a community prevalence of 10% (10) and is associated with physical morbidity and mortality. In the United States it has been estimated that the lifetime prevalence is 25% in women and 12% in men making it an extremely common disorder (11). In that country, the 12-month prevalence of major depressive disorder ranges between 5.2 and 6.6% (12, 13). Female gender, middle age, widowed, separated or divorced marital status and low income were significantly associated with increased risk (13).

In the Caribbean, there have not been any rigorous population prevalence or incidence studies. One study in Jamaica found that 52% of women and 40% of men were often depressed in the previous month (14) while a community sample in Trinidad & Tobago reported a prevalence of 14% (15). High rates of depression have also been reported for adolescents (25%) and these were significantly associated with violence in the home and substance use (16).

The higher prevalence in women may occur because men do not express their distress through depressive symptoms and instead displace them into alcohol and drug abuse and other high risk behaviour. In most societies however, it is reported that women are more likely to be diagnosed with depression than men. A study reported that the prevalence of post partum depression was in the range of 25 % in Trinidad & Tobago (17) and this contributes to the increased prevalence in women as some of them will have recurrent episodes of depression that are unrelated to pregnancy or delivery.

Depression is also associated with many other forms of social and physical pathology such as broken marriages (18), accidents and substance abuse (19). Depression has also been identified

as an independent risk factor for the subsequent development of ischaemic heart disease and stroke. When it co-exists with these conditions, it worsens the prognosis and increases the morbidity associated with them (20).

Since depression is so common and is sometimes unrecognized as a mental health problem, patients will most often present firstly to primary care facilities. It is imperative that the initial recognition, diagnosis and management are effective to ensure that disability is minimized (21).

Mood disorders contribute to an increased consumption of health care because many people do not understand what they are experiencing and frequently respond by seeking medical help before mental health help. The cost of depression in Europe in 2004 was estimated to be 118 billion Euros due to the combination of lost productivity and health care utilization (22). The increase in health care utilization also occurs because depression can present with physical symptoms such as unspecified weakness and independently leads to physical decline if left untreated (23).

Patients with bipolar disorder, for example, have been calculated to consume four times more health care than those with unipolar major depression (24). Depression whether of the unipolar or bipolar variety is also the psychiatric disorder that is most associated with suicide and more recently with homicide, making it the most potentially lethal mental illness and therefore of greatest concern to the general population (11).

Depressive symptoms can occur as part of the presentation of many medical conditions such as hormonal disease, autoimmune disorders, serious infections and oncological disease (12). Depression is also associated with several common medical conditions and can occur as a response to the disability associated with a chronic illness. It is therefore important to investigate the patient thoroughly to ensure that the presence of depressive symptoms is not masking an underlying medical condition. When the underlying disorder is treated effectively, it would contribute to the improvement in the depressive symptoms. Some of these conditions include:

- Diabetes mellitus: Most diabetic patients have periods of depression and, during this time, are likely to show poor control of their illness. In the Caribbean, it is estimated that at least 25% of the diabetic population have depression (25).
- Severe anemia: With this illness, the depression is likely to respond to treatment of the anemia per se. This is inclusive of anaemia associated with all haematological illnesses including sickle cell disease.
- Hypothyroidism: Treatment of this condition is likely to improve depressive symptoms as well.
- Carcinoma of the pancreas: Depression is frequently the first symptom of this disease. It often precedes the other symptoms of pain and gastrointestinal disturbances.
- Neurological disorders: Included among these disorders are Parkinson's Disease, multiple sclerosis, stroke, epilepsy and dementia.
- Adrenal- cortical disorders (Cushing's and Addison's disease)
- Breast and lung cancer.
- HIV and Syphilis
- Renal disorders
- Vascular disorders
- Autoimmune conditions e.g. Systemic Lupus Erythematosus.

Studies in the Caribbean have suggested that significant depressive symptoms are present in over 40% of patients presenting with acute medical conditions requiring admission to hospital (26). In Systemic Lupus Erythematosus and in haematological conditions, the prevalence of significant depressive symptoms is in the 20-30% range (27, 28).

In primary care, a prevalence rate of 11% has been reported (5). This means that when patients present with depressive symptoms they must be evaluated for the presence of the above disorders. In addition, when they present with these disorders and in these medical settings, they should be screened for depression. This also applies to obstetric services because post partum depression can be a significant complication of pregnancy (17).

Depression can be associated with substance abuse - particularly alcohol, and in adolescents, cannabis (19). A detailed history of substance use is therefore critical in the management of a patient presenting with depressive symptoms.

It can be seen in conjunction with other mental health conditions such as anxiety disorders, bipolar disorder and in the residual phase of schizophrenia where it is described as post psychotic depression (11).

It has also been reported that people with depression tend to experience more physical pain symptoms than people who are not depressed or would have more painful exacerbations of existing illness. It leads to more inappropriate use of hospital beds (29) and a greater risk of hospitalization for physical illness (30), particularly in the elderly and prolongs periods of hospitalization for these illnesses. It is also associated with reduced compliance to medical treatments and is an independent predictor of increased mortality for physical illness. This further increases the risk that depression will present to the general practitioner and would therefore be initially managed outside of the mental health services. In addition, when the experience is one of dysthymia which is a mild but chronic depression, many people think it is the way their life has been and will continue to be. This sense however undermines and disables them even as they are able to continue struggling to function and fulfil their daily commitments. Major depression is a more acute phenomenon that demonstrably causes greater distress and impairment and sometimes complete breakdown. People with depression are therefore more likely to utilize health services and the cost to society of this condition through health care utilization alone is tremendous, in addition to the social, family and community costs.

Natural History and Course

The aetiology of depression is not necessarily related to any discernible external event, although stressors and life events frequently precede its onset. The life event most strongly associated with major depressive disorder is the loss of a parent before age 12 (31). However many stressful life experiences may precede the onset of a depressive disorder including:

- Bereavement
- Separation from family
- Acute physical illness
- Threats to life both to self and close associates
- Experience of childhood trauma eg abuse, abandonment
- Institutionalisation
- Financial crisis
- Relationship crises
- Family crisis
- Sensory loss
- Perceived social and/or economic decline
- Problems at work
- Retirement
- Social isolation
- Migration
- Chronic disappointment or failed expectations
- Side effect of medication e.g. steroids, beta blockers
- Substance abuse in self or family.

In some individuals, there is no apparent trigger.

The age of onset is often in the late 20s and a family history of depression, substance abuse or suicidal behaviour should always be sought to establish possible genetic vulnerability (32). Untreated episodes may last from six months to a year and for mild major depressive disorder and dysthymia, the functional impairment sometimes does not make the patient believe that any intervention is warranted. Chronic and recurrent cases may present repeatedly with vague physical and anxiety related complaints so that the index of suspicion in these patients should be high.

It is estimated that 50-60% of patients presenting with symptoms suggestive of a major depressive episode would have had a previous episode that went untreated. Thirty percent of individuals will have only one major depressive episode (33).



Section II:

Classification and Diagnostic Criteria

Depression

According to the classification system of the American Psychiatric Association's (APA) Diagnostic and Statistical Manual IV-Text Revised Edition (DSM-IV-TR), unipolar depressive disorders can be divided into three groups, Major Depressive Disorder, Dysthymia and Depressive Disorder – Not Otherwise Specified (34). The latter is a catch all for premenstrual dysphoria (irritable and unhappy mood), minor depressive episodes and recurrent brief depressive episodes. These three categories of unipolar depression represent the major headings under which depression can be diagnosed and include many subtypes.

The following are the criteria that have been established by the APA for the diagnosis and classification of depression and represent the criteria most used by mental health professionals. There is also the DSM-IV Primary Care edition (35), which broadly reflects these same diagnostic criteria. There is an alternative classification - the International Classification of Diseases (ICD -10), which is produced by the World Health Organisation (36) and is now fairly consistent with the DSM system.

Major Depressive Episode

This is diagnosed when five or more of the following symptoms are present for most of two weeks (most of every day in the two week period) and represent a change from previous functioning:

- Depressed mood
- Markedly diminished interest or pleasure
- Significant weight loss or weight gain not due to dieting
- Insomnia or hypersomnia
- Psychomotor agitation or retardation
- Fatigue or loss of energy nearly every day
- Feelings of worthlessness or guilt
- Pronounced difficulty to concentrate and make decisions
- Recurrent thoughts of death including suicidal and/or homicidal thoughts.

The first two are the essential but not sufficient symptoms. i.e. a depressed mood and/or a marked loss of interest or pleasure.

These symptoms must cause significant distress, must not be due to the physiological effects of a medical disorder or substance use, and are not better accounted for by bereavement.

Major Depressive Episodes may be regarded as single or recurrent depending on whether they are presenting for the first time or are relapsing after a previous episode and can be mild, moderate or severe. They can occur with psychotic features where psychotic symptoms such as hallucinations and delusions are prominent, with catatonic or melancholic features, or with postpartum onset.

Mild Major Depressive Episodes suggest meeting the minimum criteria and causing relatively less functional impairment.

Moderate Depressive Episodes have more functional impairment and more symptoms.

Severe Episodes cause such marked impairment that functioning is almost totally impaired with problems of self care, marked reduction of daily activity inclusive of eating and attending to basic needs and significant suicidal and/or homicidal ideation.

Dysthymia

For dysthymia, the person must have a depressed mood for most days over at least a two year period (one year for children and adolescents). The symptoms must never have been absent for more than two months and no major depressive episode occurred within the first two years of the disorder. There must be present at least two of the following symptoms:

- Poor appetite or overeating
- Insomnia or hypersomnia
- Low energy or fatigue
- Low self esteem
- Poor concentration and/or indecisiveness
- Feelings of hopelessness

Patients with dysthymia can have superimposed major depression and are then described as having **Double Depression**.

In ***Psychotic Depression***, the patient has a severe mental disorganization, with some degree of loss of contact with reality.

In ***Melancholic Depression***, there are marked somatic symptoms.

In ***Catatonic Depression***, there may be either stupor or extreme agitation alternating with periods of immobility, stereotyped movements and repeating of words or gestures purposelessly.

Other categories of depression include ***Mixed Anxiety and Depressive Disorder*** where it is difficult to distinguish the temporal relationship between disabling anxiety and depressive symptoms and ***Adjustment Disorder with Depressed Mood*** where in response to a life stressor, the individual experiences periods of depressed mood but does not fulfil the other criteria for a major depressive episode.

Depression may also present in atypical ways at both extremes of the age spectrum (11).

In the elderly, it may present as a syndrome of decreased motivation with a lack of mental flexibility and mild cognitive deficits. Hypochondriasis and preoccupation with physical symptoms may be especially present in depression when it presents in the population over age 50 years.

In the adolescent, it may present with disruptive behaviour, substance abuse and self harm before the low mood is actually evident.

It may also occur in the post partum period with an onset two to six weeks after delivery. The risk here is self neglect by the mother and neglect of the newborn baby with infanticide as a possible outcome.

Bipolar Depression

Depression can also be part of a manic depressive illness or bipolar disorder when it is called bipolar depression. History taking should therefore always include questions about mood swings, previous manic or hypomanic symptoms eg overactivity, grandiosity, impulsiveness, excessive and inappropriate spending or sexual activity, talkativeness, easy distractibility, a subjective feeling that one's thoughts are racing beyond control. This would establish the presence of bipolar disorder rather than unipolar depression.

Extreme irritability and psychotic symptoms are more likely to be features of bipolar depression.

Table 1:
Differential Diagnosis of Psychotic Vs. Non-Psychotic Depression

PSYCHOTIC	NON-PSYCHOTIC
Early awakening from sleep	Difficulty in getting to sleep
Somatic delusions common	No somatic delusions
Subjective complaint of being depressed	Subjective complaint of fatigue, lassitude or vague somatic complaints
Somatic complaints seem relatively unimportant	Somatic complaints very important and prominent
Remorse and self-reproach present	Remorse and self-reproach absent
Does not blame others	Tends to blame others
Definable loss vague	Definable loss more easily distinguished
Loss of weight invariable	Loss of weight variable
Constipation common	Constipation variable
Course unchanged by environment	Course dependent on environment
Healthy except during attacks	Seldom absolutely well
Family history positive	Family history variable

Criteria for Major Depressive Disorder

The following represent what patients in the Caribbean might report when questioned about symptoms, which must be present for at least two weeks:

- Depressed mood most of the day, nearly every day, as indicated either by subjective account or observation by others – *feeling very sad, feeling low, crying all the time, feeling weak, not feeling right.*
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day – *no zest, no feelings for anything, life is flat.*
- Significant weight loss or weight gain when not dieting, or decrease or increase in appetite nearly every day.
- Insomnia or hypersomnia nearly every day – *don't feel to get out of bed or can't sleep at all.*
- Psychomotor agitation or retardation nearly every day (observable by others) – *pacing up and down all the time, can't rest, don't want to do anything.*
- Fatigue or loss of energy nearly every day – *always tired, always want to rest, can't do any work.*
- Feelings of worthlessness or excessive or inappropriate guilt - *blame myself for everything, I am like a blight, can't succeed at anything, nobody likes me and I don't blame them.*
- Diminished ability to think or concentrate, or indecisiveness, nearly every day – *can't think, can't study anything, head always hurting.*
- Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or specific plan for committing suicide – *best thing for me is death, I am better off dead, want to sleep for a very, very, long time, just want to sleep and never get up, life has nothing for me again.*



Section III:

Screening for Depression

Overview

Reasons for screening include:

- Depression is an important disorder that contributes to significant morbidity as well as increased mortality.
- Depression has been largely undetected by primary health care providers, particularly in its early stages.
- There is evidence that early recognition and treatment improves long term outcome.

It is important to note that screening is only effective when there is adequate treatment and follow up.

The General Health Questionnaire can be used as a screening instrument to determine the likelihood of mental health symptoms affecting the individual's physical health and their perception of their health (38). Many scales are available for the assessment of the presence of depressive symptoms. These include the Beck's, Hamilton's, Montgomery-Asberg, Zung, SIG E CAPS and the Patient Health Questionnaire (PHQ). A few have been validated in the Caribbean context such as the Zung scale (39) and the SIG E CAPS (26). Assessment tools are therefore available for use by practitioners in the Caribbean. However, it must be emphasized that these tools only indicate the presence of depressive symptoms and do not diagnose the disorder. Two simple questions – do you feel sad or down ? and do you still enjoy the things you usually do ? can also be used in contexts where quick screening is required. This instrument the PHQ-2 has also been validated for use in adolescents (40).

The screening tools are administered to determine the presence of depressive symptoms and to establish the severity of these symptoms in the context of diagnostic criteria.

Screening in the Elderly

A high proportion of depression in older people is subthreshold depression and may not meet criteria for the diagnosis of major depression. It is however still a major cause of morbidity and mortality. Dysthymia is therefore more common in older people. Another subtype is late onset depression co-occurring with vascular disease giving rise to vascular depression. In vascular depression, there is reduced depressive ideation but increased apathy and retardation, cognitive impairment and reduced insight with neurological/radiological evidence of ischaemic brain damage (37).

Approximately one in eight people living in the community will have clinically important depressive symptoms. The prevalence among patients attending primary care physicians is likely to be three in eight and these rates are further increased in nursing homes and other residential facilities for the elderly (38).

There are specific rating scales for geriatric depression such as the Geriatric Depression Scale (GDS), and these should be utilized in the diagnosis of depression in the elderly.

There is a four-item version of the GDS that may be more useful in the primary care setting. The questions are:

- Are you basically satisfied with your life?
- Do you feel that your life is empty?
- Are you afraid that something bad is going to happen to you?
- Do you feel happy most of the time?

Two or more responses to these questions endorsing depressive ideation is suggestive of major depressive disorder and demands a fuller evaluation (38).

Screening in Children and Adolescents

The clinical presentation of major depressive disorder in children and adolescents is similar to the clinical picture in adults, however symptoms may be influenced by a child or adolescent's developmental stages (41-45). It has been found that depression in adolescents is more likely when there is violence in the home and a lack of connectedness to a family network (46).

It should be noted that:

- Children may have mood lability, irritability, low frustration tolerance, temper tantrums, somatic complaints, and/or social withdrawal instead of verbalizing feelings of depression (47).
- Children tend to have fewer melancholic symptoms, delusions, and suicide attempts than depressed adults (48)
- School performance often declines and as a result of temper tantrums and other externalizing behaviours. Children and adolescents with depressive disorders are often diagnosed with conduct disorder.

ALWAYS refer children and adolescents with depressive symptoms to the mental health team or/ and paediatrician as treatment of depressive disorders in children and adolescents can be complicated by increased suicidality post initiation of antidepressant medications.

When to Suspect Depression

When the patient reports the following symptoms, inter alia, even when not specifically asked:

- Thoughts of suicide and homicide
- Recurrent and vague somatic complaints;
- Increased irritability
- Chronic pain complaints unrelieved by conventional analgesics
- Extreme reactions to life events
- Repeated requests for sick leave
- Increased frequency of visits
- Diagnostic uncertainty
- Decreased functional effectiveness
- Increased alcohol or substance use
- History of depression or bipolar disorder
- History of suicide attempts and /or self harm e.g. cutting
- Family history of suicide or alcohol dependence
- History of or current experience of epilepsy
- Chronic illness especially with physical complications
- Patients with organ failure
- Complaints of poor sleep and decreased appetite.

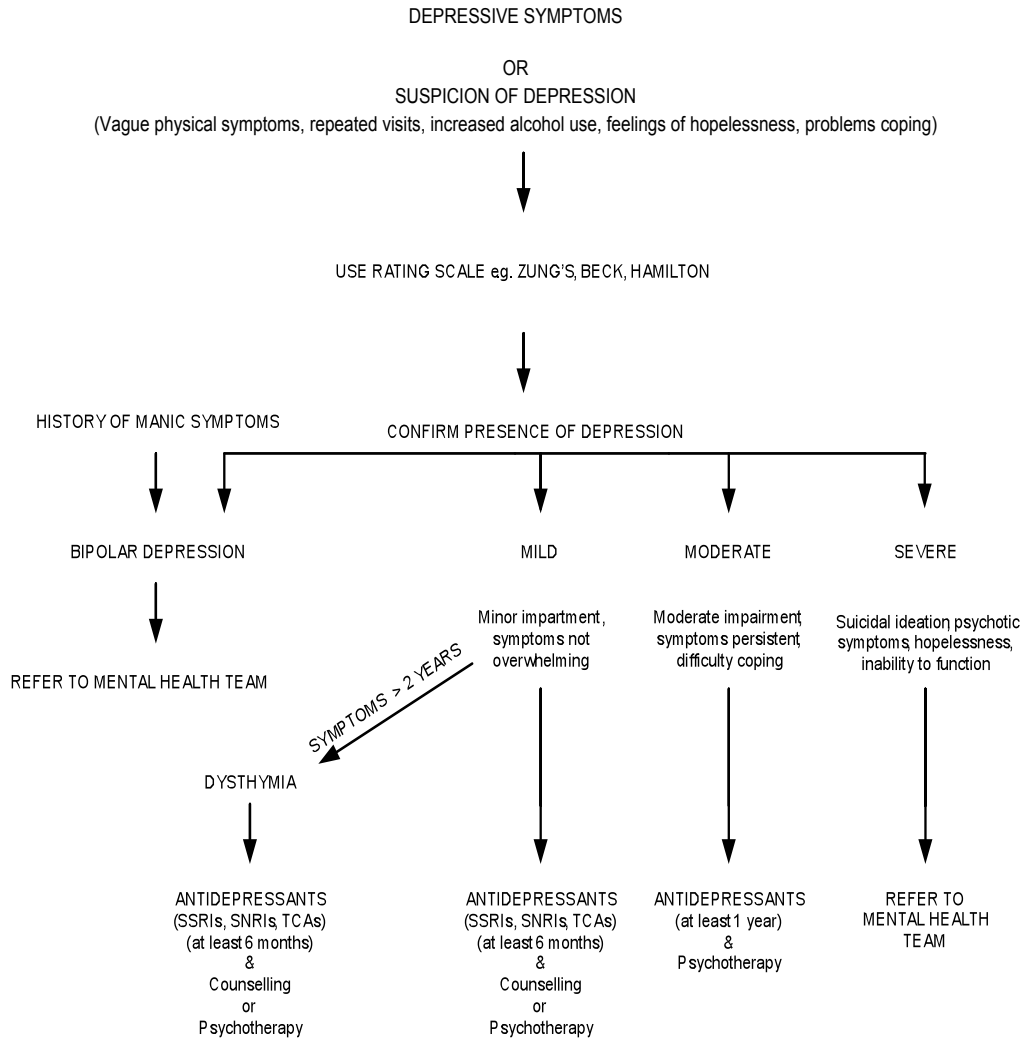
Attention must be paid to factors including local idioms that might indicate depression such as responses to broken relationships (e.g. Tabanca in Trinidad & Tobago), and loss of sexual function in males. Depression may also be masked by alcohol and substance abuse and situations in which there is domestic violence, delinquency and inappropriate violent behaviour may indicate underlying depression.

When to Suspect Bipolar Depression

- Strong family history of bipolar disorder
- Rapid onset of symptoms; marked psychomotor retardation and hypersomnia, prominent psychotic symptoms.
- Rapid response to antidepressant medications

ALWAYS refer patients with a strong family history of bipolar disorder to the mental health team for treatment.

Figure:
Guidelines for Screening, Diagnosing and Managing Depression





Section IV:

Effective Delivery of Care

It is recommended that primary care physicians treat only mild and moderate depression in general and subclinical depressive symptoms in the elderly. Anything else should be referred to the mental health team or psychiatrists, where one is available.

Requirements for Effective Care

Some of the requirements for the effective delivery of care are competent personnel, adequate patient management system and facilities, adherence to the screening requirements and a good referral system.

Personnel

The management of depression is facilitated by a multi-disciplinary team. The composition of the team will depend on the country's resources but should include at least one or all of the following:

- Medical Doctor
- Nurse
- Primary Caregiver
- Psychologist
- Psychiatrist
- Social Worker

Patient Management System

The establishment of a registry is ideal to ensure patients are followed up and to minimize the risk of suicide. Confirmation that there is compliance with the prescribed treatment regimen with the social support network, where it exists, is also necessary.

The person with depression should have regular contact with the health system. After the initial visit and diagnosis, the patient should be seen at weekly or fortnightly intervals to monitor progress and response to medication if they have not been referred to a mental health service. In the case of the latter, they should be followed up to ensure that they have acted on the referral.

Once treatment has begun, it should continue for at least six months to minimize the risk of relapse after a first episode of depression. Where there have been previous episodes, it is recommended that patients be treated for at least one year if they have had one previous episode and for two years to indefinitely if they have had more than one previous episode. Medication should be weaned off and not stopped abruptly. Some clients would require that they stay on medication for longer periods. The use of rating scales to objectively monitor progress is advised.

There should always be an index of suspicion for prolonged depressive symptoms and those cases that appear to be unresponsive to treatment as possible signs of undiagnosed malignancies, infections and hormonal problems. In women, a history of excessive premenstrual irritability is often a sign of relapse.

Patients should be reviewed annually using rating scales for depression and doing general health checks.

The Initial Visit

Medical History

A comprehensive medical history should be elicited to determine the patients' baseline information. This includes:

- History of symptoms
- History of other medical conditions
- Medications being used
- Risk factor assessment (smoking, alcohol intake, exercise patterns, nutrition, family history of depression, hypertension, vascular disease, psychological factors)
- Identify factors that may affect aetiology, course and management of depression (cultural, educational, socio-economic, alcohol use).

Physical Examination

This is to detect the presence of medical disorders and includes a neurological examination. In the middle aged and elderly, always consider Parkinson's Disease.

Laboratory Tests

These include:

- Thyroid function tests
- HIV and VDRL (where history indicates)
- Fasting blood sugar
- Complete blood count
- Renal function tests
- Liver function tests
- Other investigations as necessary and indicated e.g. CT or MRI scan, EEG, ECG, serum cortisol (where Cushing's Disease is suspected)

Psychotherapies

These therapies include:

- Supportive
- Cognitive or Cognitive Behavioural
- Interpersonal
- Problem Solving
- Marital
- Family
- Group

Note that apart from supportive therapy, patients should be referred to specialist psychological services for the provision of psychotherapies.

When to Refer to the Mental Health Team

- Active suicidal ideation
- Active homicidal ideation
- Significant psychotic or catatonic symptoms
- Treatment resistance/ failure to respond to medication
- Frequent recurrences or relapses
- Diagnostic uncertainty
- Severe depression with marked anorexic symptoms and severe functional impairment
- Possible presence of bipolar or manic depressive illness
- Co-morbid alcohol and/or other substance abuse
- Cognitive impairment in the elderly

Treatment of Depression

Treatment objectives include:

- To eliminate all depressive symptoms
- To reduce the risk of suicide, self neglect and homicide
- To restore optimal functioning
- To ensure effective management of life problems contributing to depressive episode
- To manage any co-existing or co-morbid medical conditions
- To prevent or minimize risk of relapse.

Treatment Options

A summary of evidence-based treatment options is presented in the Table 2.

Table 2:
Treatment Options

Condition	Treatment
Bipolar depression	Antidepressant and mood stabiliser
Psychotic depression	Antidepressant and antipsychotic
Severe non-psychotic depression	Antidepressant and psychotherapy
Moderate depressive episode	Antidepressant or psychotherapy such as cognitive therapy
Dysthymia	Antidepressant or psychotherapy
Grief and bereavement	Antidepressant or psychotherapy
Subclinical symptoms – with persistence	Antidepressant or psychotherapy
Subclinical symptoms –not persistent	Regular monitoring

Regular counselling, diet and physical exercise, management of sleep patterns, relaxation techniques, Vitamin B based supplements should be the first line of treatment for depression and should be maintained throughout the course of the disease.

Nutritional Management: Regular meals and prevention/management of obesity are emphasized. Particularly helpful are bananas, dates, raisins and prunes which are high in tryptophan, the amino acid precursor of serotonin. Foods high in omega 3 fatty acids are also useful (49).

Physical Activity: Daily exercise and outdoor activity are encouraged.

Pharmacological Management

The agents include:

- Tricyclic Antidepressants (TCA)
- Selective Serotonin Reuptake Inhibitors (SSRI)

- Serotonin and Norepinephrine Reuptake Inhibitors (SNRI)
- Dopamine- Norepinehrine Reuptake Inhibitors (DNRI)

The choice depends on cost and presence of other co-morbid conditions.

The *Tricyclic Antidepressants* are the cheapest but have some potentially dangerous side effects. They are also useful when sedation is required as in patients who are severely afflicted with insomnia. Examples include Amitriptyline and Imipramine.

Side effects include hypotension, dizziness, excessive daytime drowsiness, cardiac arrhythmias, dryness of mouth, constipation and blurred vision. Rarely, they may cause myoclonus. It is to be noted that the tricyclics are potentially lethal in overdose so treatment with them should be initiated very cautiously.

The *Selective Serotonin Reuptake Inhibitors* are no more efficacious than the tricyclics but have less potentially dangerous side effects and are thought to be better tolerated. These include Fluoxetine, Paroxetine, Sertraline and Citalopram.

They are relatively expensive though most now have cheaper generic alternatives. They are especially useful in the presence of generalized anxiety or panic attack symptoms.

Side effects include weight gain, nausea, sexual dysfunction. In high doses, there is also the risk of the serotonin syndrome which is characterized by delirium, hyperthermia, hyperreflexia, and myoclonus.

The *Serotonin and Noradrenaline Reuptake Inhibitors* are thought to be contemporary equivalents of the tricyclics with less side effects. They are also quite expensive and include Venlafaxine and Duloxetine. The side effects of note are headaches, raised blood pressure and cardiac conduction problems.

The *Dopamine–Norepinephrine Reuptake Inhibitor* most used is Bupropion and is the indicated drug when sexual dysfunction is a concern. It is also being used to assist patients in the cessation of cigarette smoking. The major side effect is the risk of seizures and this drug is contraindicated in a patient with a history of epilepsy.

Table 3:
Common drugs and their maintenance doses for adults

Drug	Starting Dose	Therapeutic Dose
Amitriptyline	25-50mg	75-150mg
Imipramine	25-50mg	75-150mg
Fluoxetine	10-20mg	20- 40mg
Sertraline	25-50mg	50 – 150mg
Paroxetine	10 – 20mg	20 – 40 mg
Venlafaxine	37.5mg	75 – 225 mg
Duloxetine	30mg	60 mg
Bupropion	150mg	150 - 300 mg

Blood levels should be sought among those who are not responding or where they are taking other drugs that may interact with the antidepressants. Blood levels are also useful in the detection and management of non- compliance.

Acute Phase of Management

- Initial response to treatment usually occurs after 10-14 days.
- Patients must be advised that the administration of the medication will not cause their depressive symptoms to disappear immediately and that the symptoms will improve gradually.
- Optimum treatment effectiveness would take 6-8 weeks and treatment failure cannot be pronounced before this time period has passed using the optimum therapeutic dose.
- It may be necessary during this phase to augment therapy with sleep aids such as Zolpidem and Zopiclone where insomnia is a major feature or with anxiolytics such as Alprazolam or Lorazepam where anxiety symptoms are prominent. These should not be prescribed for periods longer than one month.

Continuation Phase

- It is recommended that treatment be continued for at least 16-20 weeks after full remission is achieved in patients with a first episode of uncomplicated major depression.
- The first 8 weeks after resolution of symptoms is a period of high vulnerability to relapse. Medication should be weaned off and not discontinued abruptly.

Maintenance Phase or Long term Treatment

- This should be considered for those patients with coexisting chronic medical disorders, recurrent depressive episodes, in unrelenting adverse social and/or economic situations or where they have been exposed to long term trauma or abuse. Referral for psychotherapy would also be indicated in these situations.
- Supportive psychotherapy is an important facet of management and primary care practitioners should be aware of this need in their patients. The capacity to listen effectively and offer words of encouragement and support are an integral part of the management process.
- Patience with the treatment regimen is also sometimes required and practitioners should not give in to the temptation to change medications before an adequate trial at the optimum dose has been undertaken.
- In the elderly, cognition should always be assessed and if significant impairments persist after the relief of depressive symptoms, referral to a mental health service for evaluation should be considered with regard to the possible presence of dementia. If the onset of the cognitive impairment precedes that of the low mood then evaluation for dementia should be the primary management approach. The Folstein Mini Mental State Examination is useful in this regard with a normal score being in the range of 26-30.
- In post partum depression, antidepressant medication should be used only when absolutely necessary for example in those with a previous history of depression, a family history of mental illness and where self care and care of the baby are likely to be compromised. When psychotic symptoms occur, treatment is inevitable and referral to a mental health service is mandatory because of the risk of suicide and infanticide.

Co-morbidity Issues in Treatment

- There should be aggressive management of co-morbid medical and psychiatric disorders
- Recognition of drug interactions is critical
- Depression can also be a response to the impairments and disabilities that result from some physical illnesses. Diagnosis and treatment of the underlying condition as well as effective communication from medical personnel about the disorder are critical to reducing the risk of a depressive response to the presence of the medical illness.

Prevention and Reduction of Complications

- Antidepressants should be prescribed with caution in patients with the following diseases: asthma, hypertension, cardiovascular disease, obstructive uropathy, epilepsy and glaucoma. These may all be worsened by the administration of antidepressant medication and careful monitoring is necessary.
- Most of the side effects of the antidepressants can be managed by reducing dosage and when this compromises therapeutic effectiveness, a change in medication is indicated.
- When depression is associated with a major stressor, psychotherapy is almost always necessary as well as practical strategies to deal with the stressor including referral for legal, social welfare service and financial advice.
- When it is specifically related to a marital situation, counseling should also be included in the treatment plan. Similarly, when there are family stressors, the family may be required to participate in the treatment process.
- In women, hormonal concerns should always be considered in the evaluation and treatment of depressive symptoms. These include pregnancy and the postpartum period, menstrual irregularities and menopause.
- Premenstrual dysphoric disorder or premenstrual syndrome should be considered when the mood symptoms are a consistent feature of the premenstrual phase of the menstrual cycle and in severe cases, antidepressants can be prescribed.

Summary of Key Issues

- **Becoming aware that depression can be a clinical and treatable condition**
- **Understanding, recognising and acknowledging the presence of depressive symptoms**
e.g. weight changes, sleep disturbances, depressed mood, loss of interest in things, loss of energy and drive, poor concentration, feelings of hopelessness, suicidal ideation or attempts
- **Understanding the disease process and the ways in which the disease presents itself especially in the context of physical symptoms and accompanying physical illness**
- **Diminishing the sense of personal weakness and social stigma**
- **Becoming aware of the treatment options both medical and psychotherapeutic and using these appropriately** – use of antidepressants for a minimum of 6 months to one year; referral for psychotherapy either individual or family, where appropriate
- **Incorporating appropriate lifestyle management** – reduction of stress, regular exercise, access to social support, balanced diets
- **Monitoring the effectiveness of any intervention**
- **Preventing, detecting and treating chronic complications**
- **Effective partnering of patient, practitioner, other services and mental health team where appropriate.**

References

1. Solomon A. (2001) *The Noonday Demon, An Atlas of Depression*. Scribner, New York.
2. Murray CJL & Lopez AD (1997) Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study *Lancet* 349 (9063), 1498-1504.
3. Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B. (2007) Depression, chronic diseases and decrements in health : results from the World Health Surveys. *Lancet* 370 (9590), 851-858.
4. Lecrubier Y (1998) Is depression under-recognised and undertreated? *International Journal of Clinical Psychopharmacology* 13, Suppl 5, 153-156.
5. Maharaj RG, (2005) The prevalence of depression among family practice patients in North West Trinidad. *West Indian Medical Journal* 54 (Suppl 2), 61.
6. Maharaj RG (2007) Depression and the nature of Trinidadian family practice: a cross sectional study. *BMC Family Practice* 8, 25
7. Epstein RM, Duberstein PR, Feldman MD, Rochlen AB, Bell RA, Kravitz RL, Cipri C, Becker JD, Bamonti PM, Paterniti DA (2010) 'I didn't know what was wrong.' How people with undiagnosed depression recognize, name and explain their distress. *Journal of General Internal Medicine* 25, 954-961.
8. Horwitz AV. & Wakefield JC (2007) *The Loss of Sadness : How Psychiatry Transformed Normal Sorrow into Depressive Disorder*. Oxford University Press, New York.
9. Lamoureux BE, Linardatos E, Fresco DM, Bartko D, Logue E, Milo L (2010) Using the QIDS-SR16 to identify major depressive disorder in primary care medical patients. *Behavior and Therapeutics* 41 (3), 423-431.
10. Singleton N, Bumpstead R, O'Brien M, Lee A, Meltzer H (2003). Psychiatric Morbidity among Adults living in Private Households, 2000. *International Review of Psychiatry* 15, 65-73.
11. American Psychiatric Association (2000) *APA Practice Guidelines*. American Psychiatric Association, Washington DC.
12. Kessler RC, Berglund P, Demier O, Jin R, Koetz D, Meikangas KR, Rush AJ, Walters EE, Wang PS (2003) National Comorbidity Survey Replication. The epidemiology of major depressive disorder : results from the National Comorbidity Survey Replication (NCS-R) *Journal of the American Medical Association* 289 (23), 3095-3105.

13. Hasin DS, Goodwin RD, Stinson FS, Grant BF (2005). The epidemiology of major depressive disorder: results from the National Epidemiologic Survey on Alcoholism and Related Conditions. *Archives of General Psychiatry* 62 (10), 1097-1106.
14. Wilks R, Younger N, Ashley DE, Ward E, Mullings J, Forrester TE (2003) The occurrence of depression and its association with obesity, diabetes mellitus and hypertension in Jamaica. *West Indian Medical Journal* 52 (Suppl 3), 51.
15. Bandhan T, Chastanet Y, Emmanuel A, Regobert J, Subramanaian B, Yogi D, Poon-King C, Hutchinson G (2006) The prevalence of selected vascular disease risk factors in a community setting in Trinidad. *West Indian Medical Journal* 54 (Suppl 2), 78
16. Maharaj RG, Alli F, Cumberbatch K, Laloo P, Mohammed S, Ramesar A, Rampersad N, Roopnarinesingh N, Ramtahal I (2008) Depression among adolescents aged 13-19 years attending secondary schools in Trinidad – prevalence and risk factors. *West Indian Medical Journal* 57 (4), 352-359.
17. Ramesar J, Ali M, Baldeo T, Beharry C, Chong R, Maharaj V, Ramroop R, Hutchinson G. (2006) Post partum depression among Trinidadian women : Prevalence and associated risk factors. *West Indian Medical Journal* 55 (Suppl 2), 35.
18. Bulloch AG, Williams JV, Lavorato DH, Patten SB (2009) The relationship between major depressive disorder and marital dysfunction is bidirectional. *Depression and Anxiety* 26, 1172-1177.
19. Davis L, Uezato A, Newell J, Frazier E. (2008) Major depression and co-morbid substance use disorders. *Current Opinion in Psychiatry*, 21 (1), 14-18.
20. Grippo AJ & Johnson AK (2002) Biological mechanisms in the relationship between depression and heart disease. *Neuroscience and Biobehavioural Reviews* 26, 941-962.
21. Lepine JP (2001) Epidemiology, burden and disability in depression and anxiety. *Journal of Clinical Psychiatry* 62 (Suppl 13), 4-10.
22. Sobocki P, Jonsson B, Agst J, Rehnberg C. (2006) The cost of depression in Europe. *Journal of Mental Health Policy and Economics* 9 (2), 87-98.
23. Penninx BW, Deeg LJ, van Eijk JT, Beekman AT, Gurainik JM (2000) Changes in depression and physical decline in older adults : a longitudinal perspective. *Journal of Affective Disorders* 61, 1-12.

24. Bartels SJ, Forester B, Miles KM, Joyce T (2000) Mental health service use by elderly patients with bipolar disorder and unipolar depression. *American Journal of Geriatric Psychiatry* 8, 160-166.
25. Irving RR, Mills JL, ChooKang EG, Morrison EY, Wright-Pascoe RA, McLaughlinWA, Mullings AM (2007) Depressive symptoms in children of women with newly diagnosed type 2 diabetes. *Primary Care Companion Journal of Clinical Psychiatry* 9 (1), 21-24
26. Hutchinson G, Kodali S, Bruce C, Thomas C (2003) Depressive symptoms among acute medical admissions to a general hospital. *West Indian Medical Journal* 52 (Suppl 3), 51.
27. Hutchinson G, Neehall JE, Simeon DT (1996) Psychiatric disorders in systemic lupus erythematosus. *West Indian Medical Journal* 45, 48-50
28. Hutchinson G, Bruce C, Charles KS (2004) Depression in haematological disorders. *West Indian Medical Journal* 53 (Suppl 2), 46-47.
29. Ingold BB, Yersin B, Wietlisbach V, Burckhardt P, Bumand B, Bula CJ (2000) Characteristics associated with inappropriate hospital use in elderly patients admitted to a general internal medicine service. *Aging* 12, 430-438.
30. Huang BY, Comoni-Huntley J, Hays JC, Huntley RR, Galanos AN, Blazer DG (2000) Impact of depressive symptoms on hospitalization risk in community dwelling older persons. *Journal of the American Geriatrics Society* 48, 1279-1284.
31. Brown GW, Harris TO, Copeland TR (1977) Depression and loss. *British Journal of Psychiatry* 130, 1-18.
32. Christie-Burke K, Burke JD, Regier JD, Rae DS (1990) Age at onset of selected mental disorders in five community populations. *Archives of General Psychiatry* 47, 511-518.
33. Fernandez A, Pinto-Meza A, Bellon J, Rauva-Roch P, Haro JM, Antonell I, Palso D, Renanumbra MT, Fernandez R, Blanco E, Luciano JV, Serrano-Blanco A (2010) Is major depression adequately diagnosed and treated by general practitioners ? Results from an epidemiological study. *General Hospital Psychiatry* 32 (2), 201-209.
34. American Psychiatric Association (2000) *Diagnostic and Statistical Manual – 4th Edition Text Revision*. American Psychiatric Press, Washington DC.
35. Pingitore D & Sansone RA (1998) Using DSM-IV Primary Care Version : A guide to psychiatric diagnosis in primary care. *American Family Physician* 58 (6), 1347-1352.

36. World Health Organisation (1993) International Classification of Mental and Behavioural Disorders – Tenth Edition, World Health Organisation, Geneva.
37. Alexopoulos GS, Meyers BS, Young RC, Campbell S, Sibersweig D, Charlson M (1997) Vascular depression hypothesis. *Archives of General Psychiatry* 54, 915-922.
38. Baldwin RC, Chiu E, Katona C, Graham N (2002) Guidelines on Depression in Older People. *Practicing the Evidence*. Martin Dunitz, London.
39. Maharaj RG, Reid S, Misir A (2005) Validation of an interviewer applied modified Zung scale for depression in a West Indian population. *West Indian Medical Journal* 54 (Suppl 2), 61.
40. Richardson LP, Rockhil C, Russo JE, Grossman DC, Richards J, Mc Carty E, Katon W. (2010) Evaluation of the PHQ-2 as a brief screen for detecting major depression among adolescents. *Pediatrics* 125 (5), 1097-1103.
41. Birmaher B, Brent D; AACAP Work Group on Quality Issues (2007). Practice Parameters for the Assessment and Treatment of Children and Adolescents with Depressive Disorders. *Journal of the American Academy of Child and Adolescent Psychiatry* 46(11), 1503-1526.
42. Lewinsohn PM, Rohde P, Gau JM (2003) Comparability of self report checklist and interview data in the assessment of stressful life events in young children. *Psychological Reports* 93 (2), 459-471.
43. Luby JL, Mrakotsky C, Heffelfinger A, Brau K, Spitznagel E. (2004) Characteristics of depressed preschoolers with and without anhedonia ; evidence for a melancholic depressive subtype in young children. *American Journal of Psychiatry* 161 (11), 1998-2004.
44. Yorbik O, Birmaher B, Axelson D, Williamson DE, Ryan ND (2004) Clinical characteristics of depressive symptoms in children and adolescents with major depressive disorder. *Journal of Clinical Psychiatry* 65 (12), 1654-1659.
45. Klein D, Wild TC, Cave A (2005) Understanding why adolescents decide to visit family physicians: qualitative study. *Canadian Family Physician* 51, 1660-1661.
46. Maharajh HD, Ali A, Konings M. (2006) Adolescent depression in Trinidad and Tobago. *European Journal of Child and Adolescent Psychiatry* 15 (1), 32-37.
47. Pavuluvu MN, Birmaher B, Naylor MW (2005) Pediatric bipolar disorder : a review of the past ten years. *Journal of the American Academy of Child and Adolescent Psychiatry* 44 (9), 846-871

48. Fergusson DM, Horwood LJ, Ridder EM (2005) Suicidal behaviour in adolescence and subsequent mental health outcomes in young adulthood. *Psychological Medicine* 35(7), 983-993.
49. Murray M (1996) *Natural Alternatives to Prozac*. Morrow, New York.