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Unit No. 5

ADOLESCENT DEPRESSION

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ABSTRACT

Major Depressive Disorder (MDD) is an important health condition that family doctors will often encounter. One of the sub-groups that has drawn considerable concern in recent years has been adolescents (those between 13 and 19 years of age) due to the increasing rate of suicide in this population. This article seeks to provide an update on how family doctors can manage adolescents with MDD (also colloquially known as "adolescent depression"). Establishing an accurate diagnosis and identifying relevant causal and contributory factors is important in developing an individualised management plan. A wide range of interventions, pharmacological as well as non-pharmacological, can be considered in the management of adolescent depression. Short-term medications to help symptoms such as insomnia or panic attacks can play a role. Where antidepressants are introduced for moderate to severe depression, the family doctor plays a key role in helping adolescents and their caregivers understand their mechanism of action and side-effect profile. Non-pharmacological interventions, which often require schools and community partners, play a key role in aiding recovery. Finally, suicide risk should be continually assessed and timely referrals to emergency services or specialists should be considered.

Keywords: Adolescent depression, antidepressants, psychotherapy, primary care, suicide

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INTRODUCTION

Worldwide, Major Depressive Disorder is a significant mental health concern that affects people of all ages, including adolescents (13 to 19 years of age). Nearly 3 percent of youth worldwide are reported to have a depressive disorder.[1] A recent 2022 study in Singapore showed that 11.7 percent of youth displayed symptoms indicative of depression.[2] As is the case for many common medical conditions, family doctors play an essential role in detecting and managing adolescent depression. Identifying the signs, elucidating causal and contributory factors, and implementing appropriate interventions are essential steps in closing the large treatment gap[3] and providing effective care to the generation that will be tomorrow's working adults.

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RECOGNISING THE SIGNS AND MAKING A DIAGNOSIS

Signs of adolescent depression are similar to those in adults and include the following: (a) low mood, which may manifest as persistent sadness, tearfulness, emotional numbness, and frequently in adolescents, irritability; (b) anhedonia, the inability to feel pleasure even when performing an activity that was previously enjoyed; (c) changes in sleep patterns, including hypersomnia and not just insomnia; (d) appetite changes, where besides loss of appetite, increased snacking and even binges may be noted; (e) weight changes associated with appetite changes; (f) fatigue and low energy; (g) difficulty with concentration and associated cognitive functions; (h) feelings of guilt or hopelessness; and (i) thoughts of self-harm and suicidal ideation.

According to diagnostic criteria from the Diagnostic and Statistical Manual, 5th Edition (DSM-5), at least five of these symptoms should be present (including either low mood or anhedonia) for at least two weeks before a diagnosis is made.[4] Adolescent depression should be distinguished from the occasional sadness and mood swings, which many adolescents experience as they search for meaning, identity, and companionship.

Other behavioural changes are also often apparent in depressed adolescents and include school refusal (usually differentiated from truancy where there is hiding of school absence from caregivers), social withdrawal (this not only includes interactions that are face-to-face but also over social media), poor self-care, and increase in "escape-seeking" maladaptive coping behaviours such as gaming and pornography. Symptoms of anxiety, e.g., constant nervousness, feelings of being "on-edge", and muscle tension, as well as a wide range of unexplained somatic symptoms are also common in those with adolescent depression.

A standardised psychometric assessment, such as the free-to-use PHQ-9[5] (there is an adolescent version available as well[6]) or the Youth version of the Depression, Anxiety and Stress Survey (DASS-Y),[7] can be employed to aid in in the diagnostic interview. These assessments are available without charge online and can be easily administered as part of a consultation. Suicide risk should also be assessed – if necessary, this can be achieved with the assistance of a validated instrument such as the Columbia-Suicide Severity Rating Scale (C-SSRS).[8]

To build therapeutic alliance, the family doctor should try to spend time alone with the adolescent to establish rapport and offer privacy, whilst gently informing the latter about the need to keep them and others safe if a significant risk of harm arises. Of note, adolescent self-reports may differ from their parents and other caregivers. Though time-consuming, it would be advisable to try and corroborate both accounts as this is important in establishing an accurate diagnosis and determining a helpful management plan.

In addition, Generations Z and Alpha adolescents have a high level of mental health awareness due to increasing education efforts in schools as well as the proliferation of mental health content on social media. There is a greater readiness to self-diagnose and to seek help[9]; while this is to be commended, family doctors do have to be careful to clarify the information that is shared with them without coming across as judgemental and invalidating.

Over the course of an assessment for adolescent depression, the family doctor should also be on the lookout for a wide range of other psychiatric comorbidities, which include anxiety disorders, obsessive-compulsive related disorders, neurodevelopmental disorders, and eating disorders. Where such comorbidities have been identified, further specialist consultation should be considered.

IDENTIFYING CAUSAL AND CONTRIBUTORY FACTORS

Identifying underlying causal and contributory factors can help guide further management of depression, as well as provide the patient and caregivers with an explanatory model that furthers insight. A simple and well-used model to classify such factors would be the biopsychosocial model, as illustrated below[10]:

1. **Biological Factors**: genetics, as suggested by a strong family history; hormonal changes, which is present at puberty; neurobiological differences, such as serotonin transporter gene variations; physical medical conditions, such as post-influenza, hypothyroidism, and Vitamin D deficiency; therapeutic drugs and substances, such as isotretinoin-related adverse drug reaction and inhalant abuse
2. **Psychological Factors**: insecure attachment; "slow-to-warm-up" temperament; dysfunctional cognitive schema; ruminative style of thinking
3. **Social Factors**: Adverse Childhood Experiences (ACEs); psychological trauma; family dysfunction; peer bullying and ostracisation; academic pressure; National Service difficulties; occupational challenges; COVID-19 pandemic-related experiences

EXAMINATION

A Mental State Examination should be integrated within the interview, looking out for possible features of depression such as poor eye contact, evidence of diminished self-care, tearfulness, hostility, psychomotor retardation or agitation, poverty of speech, flatness of affect, ruminative thoughts, and suicidal ideation.

A targeted physical examination should also be considered to exclude underlying physical medical conditions and identify the presence of deliberate self-harm stigmata such as unusual scratches, cutting marks, burn scars, etc. The presence of tattoos that have specific meanings (such as the semicolon symbol indicative of a desire to find hope even when experiencing suicidal thoughts) or that are very extensive may also offer a clue to the presence of hidden distress.

TREATMENT

Treatment plans should be individualised and tailored to identified needs, taking into consideration patient and caregiver preferences. The following would be key elements.

Psychoeducation

Adolescents and their caregivers should be educated on depression and reassured that, similar to other medical conditions, effective treatments are available. Concerns and expectations should be addressed, with typical fears relating to side effects, risk of addiction, the need for long-term treatment, and the impact of getting diagnosed. Perceived stigma and pre-existing cultural views on mental illness should also be understood, whilst particularly unhelpful aspects may need to be respectfully corrected.[3,11]

Psychotherapy

Cognitive-Behavioural therapy (CBT) and Interpersonal Therapy (IPT) are two of the leading forms of psychotherapy.[12] One major limitation would be the lack of formal training in this area for family doctors, as well as the limited time available in a busy family practice for such psychotherapy. Nevertheless, supportive counselling is definitely an important part of helping the adolescent and, where feasible, referrals to a registered counsellor/clinical psychologist can be helpful.

Most, if not all schools in Singapore are staffed by a school counsellor and referrals can be made to them through a memo provided to the youth/caregiver. Lists of therapists are available on the websites of the Singapore Association for Counselling and the Singapore Psychological Society's Register of Psychologists (SRP). In choosing a suitable therapist, specific expertise in working with children and adolescents would be preferable. Where affordability is an important consideration, a referral to the nearest Family Service Centre or Polyclinic would open the door to community-based counselling and clinical psychology services.

Medication

In moderate to severe cases, medication like Selective Serotonin Reuptake Inhibitors (SSRIs) might be prescribed.[11,13,14] Fluoxetine (10-80 mg daily) is the most frequently prescribed and longest-used SSRI, with Escitalopram (5-20 mg daily) being the other SSRI that is FDA-approved for adolescent depression; however, all SSRIs have been commonly used in adolescents.

The traditional maxim of "start low, go slow" can continue to be used to help improve the tolerability of SSRIs. The most frequent adverse effects in SSRIs would be gastro-intestinal side effects (e.g., nausea, dyspepsia, and changes in bowel habits), headache, giddiness, sexual side effects, etc. Some of these adverse effects may improve after a few days after initiation, and this is a point that should be emphasised to patients.

SSRIs come with a "Black Box Warning" of increasing suicidal ideation up to the age of 24 years. While the overall benefits of antidepressants where appropriately prescribed outweigh the risks including this risk of suicidal ideation, close monitoring for suicidality after initiation is strongly recommended especially in the first months of treatment and following dosage adjustments.[13]

For other antidepressant classes, their use in adolescents is usually "off-label". If the need arises, a referral to a psychiatrist for the use of such second-line antidepressants would be appropriate.

Besides the use of an antidepressant, medications can be prescribed on an as-needed basis for the purpose of ameliorating associated symptoms for short periods of time.[11] Examples of these and suitable starting doses would include a sedating antihistamine (e.g., hydroxyzine 10 mg) for insomnia, a beta-blocker (e.g., propranolol 20 mg) for physical symptoms of anxiety, and an anxiolytic benzodiazepine (e.g., lorazepam 0.5 mg) for panic attacks.

Lifestyle Modifications

Regular exercise, especially cardiovascular exercise, has been found to be as effective as antidepressants in mild to moderate depression. Other common components of a healthy lifestyle would include a balanced diet and adequate sleep. In both these areas, adolescents often face challenges due to pressures they face arising from schooling and other demands on their time. Where feasible, pet ownership may also be means of improving adolescent mental wellbeing.

Community Resources

Besides schools, there are also numerous community organisations in Singapore that cater to the mental wellbeing of youths. In addition to psychotherapy and counselling services, these organisations may be able to may provide a wide range of services such as chatline support, case management, youth mentoring, wellness activities, and creative arts. The National Community of Social Services maintains a directory listing such services.

Physical Treatments

It is uncommon for physical treatments such as Electro-Convulsive Therapy (ECT) and repetitive Transcranial Magnetic Stimulation (rTMS) to be used in adolescents. These are options for treatment-resistant cases that will require specialist referral and management.

MONITORING AND FOLLOW-UP

Family doctors should provide regular follow-up appointments to adolescents being treated for depression as their condition may fluctuate with the stressors encountered. Timely support in the event of new developments will allow treatment plans to be modified in a timely way. Where there is no improvement after a few visits, and there is presence of complex situations (such as multiple psychiatric comorbidities or challenging social factors) or the emergence of clinically-significant risks, a referral to specialist services should be offered.[3,11]

CONCLUSION

Adolescent depression is a common problem in the community and should be addressed through a comprehensive approach. This includes timely understanding of the signs and causal/contributory factors and developing an individualised multi-faceted treatment and monitoring plan. Family doctors in the community play an important role in this process, which will help to close the treatment gap.

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LEARNING POINTS

- **Adolescent depression should be considered by the family doctor as a possible diagnosis when caregivers highlight behaviours such as school refusal, social withdrawal, poor self-care and increase in maladaptive coping behaviours.**
- **Management of depression needs to be individualised; the family doctor can achieve this by identifying the causal and contributory factors using the well-known biopsychosocial model.**
- **In moderate to severe cases, the use of SSRI antidepressants should be judiciously considered with the possibility of adverse effects including the "Black Box Warning" of increasing suicidal ideation carefully explained to adolescents and caregivers.**
- **Anxiety symptoms and panic attacks can be addressed with the short-term, as-needed use of propranolol and benzodiazepines.**