MAJOR DEPRESSIVE DISORDER IN THE ADOLESCENT – BARRIERS TO MANAGING ADOLESCENT MENTAL HEALTH PROBLEMS AT PRIMARY CARE

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ABSTRACT

Major Depressive Disorder (MDD) among adolescents is an important health problem among adolescents and leads to high-risk behaviours and suicide. Given the increasing prevalence of MDD among adolescents, early identification is vital for immediate intervention. The primary care team is an important intermediator in managing MDD, whereby parents and school officials play pivotal roles in achieving optimum recovery. This case report aims to acknowledge the importance of biopsychosocial support and unveil the barriers faced in managing adolescent MDD in primary care. This was a case of a female adolescent aged 14 years old, diagnosed with MDD after a comprehensive psychological assessment. She had previously visited the clinic several times for other acute problems before MDD was diagnosed. She has been co-managed by primary care and hospital psychiatry clinic specialists. Her initial management included two weekly clinic follow-ups for clinical monitoring and counselling sessions with trivial improvement. Her mental health condition was significantly improved after an intensive approach comprising patient-family counselling, school visits, patient self-empowerment, and hospital follow-ups for psychotherapy sessions. Furthermore, her mood improved, evident in her interest in daily activities and focus on classes. Despite the busy schedules of primary care doctors, a high commitment is required for the successful management of MDD in adolescents and overcoming its challenges. Primary care plays an important role in employing a multidisciplinary team approach to coordinate care with the family and school and improve psychosocial support and peer group acceptance. Barriers could be addressed to catalyse the diagnostic process, reduce personal and social stigma, and enhance self-empowerment and compliance in achieving the most favourable care and recovery.

Keywords: Major Depressive Disorder, Adolescent, Multidisciplinary Approach, Barriers

INTRODUCTION

Adolescence is traditionally defined as the age range of 10 to 19 years. It is a transition period from childhood to adulthood, which is associated with neurobiological, emotional, and psychosocial maturation (WHO, 2014). During this transition period, adolescents face psychological challenges, social and emotional interactions, peer pressures, and exposure to high-risk behaviour, all of which increase the risk of psychological disorders, adjustment problems, and suicidal risk. Therefore, mental health awareness and positive support are critical for their transition into healthy adulthood (Awaluddin et al., 2019).

Globally, one in seven adolescents aged 10-19-year-olds experiences a mental disorder accounting for 13% of the global disease burden in this age group (WHO, 2021). Depression, anxiety and behavioural disorders are among the leading causes of illness and disability in adolescents. Alarmingly, suicide is the fourth leading cause of death among 15–29-year-olds (WHO, 2021).

Given the complex biopsychosocial framework during this age, a unique approach is imperative in managing adolescent mental health problems. A physician with excellent soft skills is more sensitive during consultation. A single risk factor is rarely responsible for the emergence of a psychiatric problem (Nebhinani & Jain, 2019). Clinicians can use the **H**ome, **E**ducation, **E**ating,

Activities, **D**rugs/Substance, **S**exuality, and **S**uicide/**S**afety (HEEADSS) screening tool to obtain more related history (Smith & McGuinness, 2014). The HEEADSS provides a structured interview and assists to identify stressors and suicidal risk among adolescents (Hamrin & Magorno, 2010). However, despite the availability of several screening tools for depression, early detection of mental illness in adolescents remains a challenge (Stanard, 2000). A delay in addressing adolescent mental health conditions results in late diagnosis and management, extending to adulthood, which increases the risk of multifaceted consequences, such as impaired physical and psychological health, and limiting opportunities to lead fulfilling lives as adults (WHO, 2021).

The four essential features of primary care were first contact, continuity, coordination, and comprehensiveness in association with patient-centred care, to improve population health physically and mentally. The availability of mental healthcare professionals and services in primary care is still not optimum, especially in managing adolescents' mental health issues. In addition, coordination of care between medical personnel, parents and school officials is still insufficient and needs to be addressed accordingly.

Primary care doctors are crucial in diagnosing and treating mental health problems in children and teens. They are typically the first point of contact for parents who are concerned about their child's mental health (Jorm et al., 2007). Subsequently, primary care doctors can develop a continuation of care with the family by understanding the family's related issues, thus enabling them to effectively treat adolescents' mental health problems. Nonetheless, both the identification and management of mental health problems pose challenges for primary care doctors. A study revealed that primary care physicians only identified 30% of adolescents with diagnosable depression (Richardson et al., 2010). Therefore, early screening in primary prevention programmes requires collaborative support from the specialist for accurate and timely diagnosis. The difficulty faced by the primary care team in managing mental health may be reduced by a liaison service offered by a tertiary specialised centre, which offers clinical mental health services within the primary care, thus evaluating the need for referrals to the hospital mental health specialist clinics. (Kramer & Garralda, 2000; Macdonald et al., 2004).

While adolescent mental health has been extensively studied in other countries, little is known about the severity of depression among Malaysian adolescent populations. Numerous studies revealed an increasing trend in the prevalence of depression among Malaysian teenagers, rising from 17.7% in 2014 to 32.7% in 2017 (Ibrahim et al., 2017; Kaur et al., 2014). With insufficient manpower, specialisation, expertise, and experience among primary care teams in handling adolescent mental health disorders, care and management might be suboptimal. Poor understanding among patients and caretakers about the services in primary care is considered an important barrier to providing effective mental health therapy in Malaysia (Aida et al., 2010). Recognising the inadequate resources and barriers in managing adolescents' mental health problems in primary care is the first step to improving and delivering effective services.

Adolescent depression can be difficult to manage, especially in primary care. In addition to the negative social stigma associated with mental illness, limited knowledge or skills in early detection among healthcare providers and low education and awareness at the community level are barriers to managing depression (Meredith et al., 2009). An underage patient with poor psychosocial support among peer groups associated with social stigma and embarrassment may further limit the management strategies (Radez et al., 2021). Adolescent health services are available in some designated primary care clinics and offer specialised treatment and approaches to adolescents. This service encompasses physical and mental health, dietary and behavioural health, and sexual and reproductive health. However, these services though inspiring, are very challenging to obtain collaboration from parents and school officials. Furthermore, the shortage of dedicated adolescent health medical personnel adds to the challenges in providing the service. Collaboration with local community bodies and non-governmental organisations (NGOs) is prudent to address the shortage of professional workforces, particularly in adolescent mental health.

This case study describes a case of depression in an adolescent that was managed primarily in primary care and co-managed by a child psychiatrist. This article focuses on the barriers to managing adolescent mental health problems in primary care, especially in coordinating care. The findings may be used as a model for managing depression in adolescents in primary care.

METHODOLOGY

Most research in adult populations Major depression is a depressive disorder that has received remarkable interest in several adult population research. This case report notes a few instances of information about adolescents with MDD in primary care. Barriers to managing the disease addressing depression in primary care settings, diagnosis, treatment and outcomes were identified in this report. Articles relevant to the case report were selected as references.

CASE REPORT

A 14-year-old teenage girl, a boarding school student with no previous medical illness, presented to the clinic complaining of epigastric discomfort and difficulty breathing for two days. She described it as sharp pain, localized over the epigastric area with a pain score of 3/10 and not radiating to other parts of the abdomen. The pain was not associated with any physical activities or mealtime. She denied symptoms of sour or globus sensation in the throat, nausea, vomiting, or loose stool. There was no blackish-coloured stool, haematochezia, or significant weight loss episode. She denied having an abnormal menstrual cycle and her last menses was three weeks ago. Upon further history, she had irregular mealtimes and frequently missed meals at the hostel dining hall due to personal reasons. She was treated with acute dyspepsia. She visited the clinic twice weekly for similar complaints, mainly due to her inconsistent dietary habit.

Upon examination, she was comfortable, not in acute pain, with poor eye contact. She has an average body build with a guarded posture. Her conjunctiva was pink, with warm peripheries with good pulse volume. Per abdomen, examination revealed normal findings. No area of tenderness or discomfort. An electrocardiogram was done to exclude cardiac causes, yet it yielded normal results.

Table 1: Laboratory Investigations Result

	Variables	Results	Normal Range
FULL BLOOD	Total White Cell	6.0 x10 ⁹ /L	4.0 – 11.0 ×10 ⁹ /L
COUNT	Haemoglobin	12.3 mmol/L	11.5 - 16.5 mmol/L
	Platelet count	$343 x10^9/L$	150 - 400 mmol/L
RENAL PROFILE	Urea	2.0 mmol/L	1.7 – 8.5 mmol/L
	Creatinine	50 mmol/L	62-150 umol/L
	Sodium	140 mmol/L	135-152 mmol/L
	Potassium	4.2 mmol/L	3.5-5.5 mmol/L
SERUM CALCIUM		2.31 mmol/L	2.13 – 2.62 mmol/L
LIVER FUNCTION	Total Protein	84 g/L	54 – 85 g/L
TEST	Albumin	40 g/L	35 - 50 g/L
	Globulin	39 g/L	20 - 39 g/L
	ALT	5 u/L	0 - 41 u/L
	AST	15 u/L	0 - 41 u/L
	ALP	60 u/L	40 - 129 u/L
THYROID	TSH	1.53 mU/L	0.68 – 3.35 uIU/mL 7.65 –
FUNCTION TEST	T4	13.8 ug/dl	13.64 pmol/L

Laboratory investigations listed in Table 1 revealed all parameters were normal, indicating she does not have any underlying organic diseases like hyperthyroidism, anaemia, kidney disease and hypocalcaemia, that may contribute to the psychiatric problem.

During the fourth visit, her clinical presentation raised suspicion of a definite diagnosis. Further questioning regarding her psychosocial issue using the Health Status Screening Form for Adolescents (BSSK) identified a 'risk' for mental illness. 'BSSK' is a short form of 'Borang Saringan Status Kesihatan' for screening adolescent health status for early detection of risk factors in mental health. During the history taking, she admitted to having a low mood and lost interest in her daily activity for six months. The symptoms degenerated a month ago near the end-year examination. It was associated with insomnia, which she described as difficulty initiating and persistently interrupted sleep, causing fatigue and energy loss during the daytime. Thus, she could not focus while studying or during academic classes, resulting in poor academic performance. She also isolated herself and refused to socialise with other friends during extracurricular activities.

Further history-taking was performed using the HEEADSS approach in Table 2.

Table 2: Adolescent Psychosocial Assessment using 'HEEADSS'

НОМЕ	She is from a high-achiever family. Her mother is a retired businesswoman, while her father is an executive manager. Her oldest sister is an accountant, while her second older sister and brother currently study at overseas universities. Her younger brother is studying in standard four primary schools. She described her relationship with her family as normal. However, sometimes, their relationship turns unpleasant due to high expectations from her parents regarding her academic performance and achievement.
EDUCATION	A form two student in a boarding school. She claimed that she struggles to live in a boarding school, away from her family. Currently, her academic performance has not been good. She was avoiding teachers and friends and frequently stays alone in the hostel after school. However, there weren't any physical or verbal bullying activities.
EATING	Generally, she has no loss of appetite or weight but has irregular meal hours and frequently misses meals at the hostel dining hall due to personal reasons.
ACTIVITIES	She is not actively involved in extracurricular activities in school. She did not engage in high-risk activities or behaviours.
DRUGS	She is not involved in any illegal drug use or smoking.

SEXUALITY	She attained menarche at 11, with a normal regular menstrual cycle and flow.
SUICIDAL RISK	At the time of assessment, she denies suicidal ideation or attempt.

The above psychosocial adolescent (HEEADSS) assessment reflected she comes from a wealthy, high achievers family. It seemed she was very stressed due to her parent's high expectations. She is also a loner struggling to be independent and self-service in the boarding school away from her family. Nevertheless, she was not involved in high-risk behaviour such as drug abuse and sexual activity.

She attempted to hide her symptoms to avoid negative perceptions and stigma. Staying in a high-prestige school added more pressure on her, in addition to high expectations from the family and strict school regulations. Otherwise, she does not have manic or hypomanic symptoms, hallucinations, delusions, and suicidal thoughts or attempts. Subsequent assessment Patient Health Questionnaire (PHQ-9) tests demonstrated the presence of moderately severe depression in her.

Table 3: Patient Health Questionnaire (PHQ-9) tests

For the last two weeks, how often have you been bothered by any of the following problems?		
1.	Little interest or pleasure in doing things	2
2.	Feeling down, depressed, or hopeless	3
3.	Trouble falling or staying asleep, or sleeping too much	3
4.	Feeling tired or having little energy	2
5.	Poor appetite or overeating	2
6.	Feeling bad about yourself – or that you are a failure or have let yourself or your family down	3
7.	Trouble concentrating on things, such as reading the newspaper or watching television	3
8.	Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	1
9.	Thought that you would be better off dead or hurting yourself in some way	0
	**TOTAL SCORE	19

^{*}Individual score: 0 = Not at all, 1 = Several days, 2 = More than half the day, 3 = Nearly every day.

The above Patient Health Questionnaire (PHQ-9) tests calculated a score of 19, which reflect moderately severe depression.

After a thorough assessment and examination according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR), she was diagnosed with moderately severe MDD. Given the multifactorial nature of potential trigger factors, a family video conference was arranged to discuss further management and obtain her treatment consent. The parents agreed to initiate pharmacological therapies. She is being monitored at school and resumes her academic classes as usual to avoid academic dropouts. The school authority was given the responsibility to act as a temporary guardian. In addition to her medication, serial counselling sessions were arranged under the clinic's supervision and school counsellors.

However, at the beginning of treatment, she complained of worsening depressive symptoms. She started to have suicidal thoughts while being alone, but there was no suicidal attempt. She defaulted on her anti-depressive medication and the previous follow-up due to her perceived peer stigma and lack of monitoring from school authorities. She was referred to the psychiatry team at the tertiary centre for close monitoring after an assessment using Beck's Suicide Intent Scale disclosed medium risk (Bhatia, 2007).

Due to the poor compliance and personal stigma issues, the primary care clinic organised a multidisciplinary approach by periodically coordinating parental meetings via video conferences, and school visits to meet the counsellor in charge of student health. A reminder of regular patient follow-up appointments was also performed to monitor the progress and enhance the non-pharmacological treatment including self-empowerment. In addition, she participated in at least four counselling sessions at the primary care managed by a psychologist counsellor, which involved cognitive behavioural therapy and stress coping mechanisms. A personal diary was used as the coping mechanism to express the patient's emotions, relieve her emotional burden and clarify her inner thought and feelings. Patient-family counselling was conducted thrice throughout the treatment duration to explore collaborative information regarding the patient's condition and discuss its management. The last patient-family meeting includes an interaction between the patient and school counsellors, discussing patient monitoring and psychosocial issues.

^{**}Total score: $\langle 5 = \text{Normal}, 5.9 = \text{Mild}, 10.14 = \text{Moderate}, 15.19 = \text{Moderately severe}, \geq 20 = \text{Severe}$

The school visit was performed twice during the treatment duration accompanied by a counsellor and hostel warden to assess the school environment that may trigger the patient's depression. She was advised to be placed under continuous monitoring by the hostel warden. Senior students and dedicated friends were entrusted to help her with academic and social issues, thereby reducing social stigma and promoting self-confidence in the patient.

Table 4: Outlines of Non-Pharmacological Management for Depression in Adolescents

COGNITIVE BEHAVIORAL THERAPY FOR ADOLESCENTS WITH DEPRESSION (Weersing & Brent, 2006)	 i. psychoeducation And Mood Monitoring: Providing parents with information about the course and characteristics of depression and its treatment. Teaching the adolescent to monitor their moods, thoughts and behaviours. ii. Pleasant activity scheduling and behavioural activation: To promote engagement in activities that provide opportunities for pleasure and mood regulation. iii. Cognitive restructuring: To help the adolescent to examine their thoughts and assess the accuracy and practical consequences of their views. Teach adolescents to reason about themselves, the world, and their possibilities for the future. Relaxation techniques to cope with continuing environmental stressors, providing social skills and conflict resolution training.
ADOLESCENT STRESS COPING MECHANISM (Mason et al., 2019)	Diaphragmatic breathing Progressive muscle relaxation Low-cost exercise Personal diaries

Table 4 above summarises non-pharmacotherapy for the patient, including cognitive behavioural therapy and stress coping mechanisms.

Reassessment at the 20th-week followed-up revealed a significant improvement in the PHQ-9 score for depression. She was able to focus during academic classes and her social relationships with other students improved significantly. She is also under follow-up at the adolescent/child psychiatry clinic co-managing her illness.

DISCUSSION

The WHO slogan "No Health Without Mental Health" has profound meaning in today's concept of health. Life's increasing challenges make mental health a top priority, especially for adolescents who have only recently learned adult roles and skills. Mental illnesses contribute significantly to the global disease burden. According to the Global Burden of Disease Reports, neuropsychiatric conditions account for up to a quarter of all disability-adjusted life-years and up to one-third of all noncommunicable diseases (Prince et al., 2007). Meanwhile, according to the National Health Morbidity Survey 2019, the prevalence of depression in Malaysia was 2.3% (IPH et al., 2019). As stated earlier, depression, anxiety and behavioural disorders are among the leading causes of illness and disability among adolescents, and suicide is the fourth leading cause of death among 15–29-year-olds (WHO, 2021). Millions of children and adolescents experience psychological distress that may not meet the diagnostic criteria for a mental disorder but significantly impact their health, development and well-being (UNICEF, 2022).

In this report, we observed a few barriers to managing her MDD at the primary care, which comprise failure to early detection of the mental illness, poor compliance with medication and defaulted follow-up, psychosocial issues related to the illness such as personal and social stigma, embarrassment and feeling despair, inadequate family support and school monitoring. These findings are consistent with the reports by Goldman (1999) in which the barriers to diagnosing and treating depression included stigma, denial, lack of availability of medical personnel and limitation of psychotherapeutic care. Thus, improvement of public and professional awareness, better access to mental health care and destigmatisation are pertinent to address these barriers.

Early detection of depression among adolescents is challenging. Primary care is often the first place of contact with adolescents with health problems, despite it being relatively infrequent compared to people in other age groups. A study revealed that primary care physicians only identified 30% of adolescents with diagnosable depression (Richardson et al., 2010). Therefore, primary care physicians should recognise signs and symptoms of depression early to provide appropriate treatment and intervention. Public and professional education efforts, destignatisation, and improvement in access to mental health care services are needed to mitigate these challenges.

Recognizing mental health illness can be difficult in primary care given the complexity of distinguishing somatic and psychological symptoms. Schoolchildren and adolescents who are frequent clinic attendees are more likely to have a mental illness (Jacobson et al., 2002). This evidence was demonstrated in this case report that early presenting symptoms could be somatic rather than psychological. The patient was noted to have irregular mealtime due to personal problems and avoidance behaviour, thereby making a diagnosis of somatic illness from the gastrointestinal system more relevant. The clue for mental illness appears after multiple visits with inconsistent history and normal findings on clinical examination and investigations in addition to 'BSSK' and 'HEEADS' health assessments. Consultation skills from healthcare providers are essential for the timely diagnosis of depression

(Asarnow et al., 2002). Good communication skills integrated with an excellent diagnostic approach and counselling are required for an early diagnosis and intervention of the illness. The physician mostly relies on the patient's entire history of presenting illness and other important history-taking components, such as past medical history, family history, and psychosocial history to make an accurate mental health diagnosis. In this case, the Health Status Screening Form or BSSK, standardised and specialised for the adolescent age group, were used to obtain a history and for health screening in the adolescent. Subsequently using the 'HEEADSS' approach in history-taking facilitates identifying the underlying stressor and suicidal risk.

In addition to the pharmacological approach, a psychosocial and environment-centred approach is recommended and proven effective in managing depression among adolescents (Dardas, 2019). In this case report, it appeared that living in a boarding school creates a highly stressful situation for the patient to seek treatment. The psychological condition is exacerbated by a lack of peer support, perceived stigma from the school community and inadequate monitoring from guardians. Non-compliance with anti-depressive medication further worsens her condition. Thus, a multidisciplinary approach by the primary care, with hospital follow-up and involvement of patient-family periodic discussions, school visits as well as patient self-empowerment has led to better progress of the disease. This approach is supported by a recent article, which mentioned that integrated and multidisciplinary services are needed to expand the scope of possible interventions and to limit the risk of poor long-term outcomes, which is also an additional potential benefit in terms of healthcare system costs (Colizzi et al., 2020).

Suicide is a 'silent enemy' in patients suffering from depression. According to the Malaysian Ministry of Health's National Health And Morbidity Survey, 6.3% of participants reported suicidal ideation, with the majority of them in adolescence (Institute for Public Health (IPH), 2012). Depression is one of the most important psychological factors associated with suicidal ideation and suicide. As in this case, she was assessed for suicidal risk during each clinic visit to intervene in the event of a later suicidal act. Beck's Suicide Intent Scale was used to determine the degree of suicidal risk. It has 20 items, each worth one to three points. A score of 15-19 was considered low risk, a score of 20-28 was regarded as medium risk, and a score of more than 29 was considered high risk.

Early identification of suicidal risk is important for immediate intervention. In cases where the safety of adolescents cannot be ensured, an urgent referral is indicated for continuous monitoring (Hamrin & Magorno, 2010). In this case, the assessment revealed changes in suicidal risk at the beginning of the treatment due to medication compliance and psychological factors such as social stigma and embarrassment. Apart from a clinical intervention, cooperation from school authorities and friends is principally essential to aid in the better management outcome and prevention of suicidal risks.

A biopsychosocial approach is a modern approach to treating psychological illness. Parental support is critical in creating a supportive environment for the treatment process (Dardas, 2019). Patients who are minors have limited treatment options without the consent of their guardians. Our local law generally acknowledges parental involvement in their child's life, including the right to consent to medical treatment (Azira et al., 2013). However, mutual agreement always results in a better outcome for both the patient and the parent. Aside from that, the school counsellor may perhaps provide regular counselling sessions to the patient as well as educational awareness of mental health to the students in general. Applying a stress-free school environment and being supportive towards the student with mental illness aids in expediting the recovery process and facilitates the student to adapt to her current life challenges. At the national level, mental health legislation and national mental health policies should be strengthened to articulate the specific mental illness and provide psychosocial support actions in providing protections for children and adolescents more clearly (UNICEF, 2022).

CONCLUSION

Mental illness can significantly impact adolescents' health, learning and participation, limiting opportunities for them to reach their full potential. Depression among adolescents may be overlooked, undiagnosed, or undertreated. Early detection and intervention could prevent unnecessary risk of suicide.

A high commitment is needed for primary care doctors to manage major depressive disorder in adolescents and to overcome its challenges. Primary care plays an important role in coordinating care with the family and school to improve psychosocial support and peer group acceptance. A multidisciplinary approach, including the healthcare team, family members, school authorities, and peer group, play an important role in managing depression among adolescents to overcome the barriers such as the diagnostic process, personal and social stigma, self-empowerment, and compliance in achieving optimum recovery. In addition, more interventional and preventive programmes should be implemented to instil awareness in our younger generations and protect them from mental illness.

The limitation of this case report was the approach and flow of management might not be ideal for other clinics with different settings. This case particularly was managed at a health clinic equipped with a dedicated and well-trained adolescent health team including counselling. However, the idea of using health screening for adolescent (BSSK) and 'HEEADSS screening remain essential in the clinical examination and help in formulating the diagnosis and management.

Another limitation is that an integrated liaison team from the hospital psychiatric clinic is not covering the health clinic, resulting in slight difficulties in direct clinical psychologist referral. Early cognitive behavioural therapy sessions were performed under primary care clinic counsellor, which has limited training compared to a clinical psychologist specialist.

WHAT IS NEW IN THIS CASE REPORT COMPARED TO THE PREVIOUS LITERATURE

- From this case study, we advocate regular screening using the BSSK for all adolescent patients attending primary care clinics, particularly those who are frequent attendees. A more complete evaluation and analysis based on HEEADSS can be integrated into the designated scheme to obtain comprehensive clinical and psychosocial history during consultation.
- 2. Thorough biopsychosocial evaluation is an important aspect of history-taking and plays a vital role in the management of mental health problems among adolescents. A multidisciplinary approach involving the healthcare team, family members, school officials, and peer groups will create a better environment for optimum recovery. As published in the Regional Report (UNICEF 2022), national mental health policies should be strengthened more openly to articulate the specific mental illness and psychosocial support in protecting children and adolescents.

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CONFLICT OF INTEREST

The authors reported no potential conflict of interest.

REFERENCES

- Aida, J., Azimah, M. N., Mohd Radzniwan, A. R., Iryani, M. D. T., Ramli, M., & Khairani, O. (2010). Barriers to the utilization of primary care services for mental health problems among adolescents in a secondary school in Malaysia. *Malaysian Family Physician*, 5(1), 31–35.
- Asarnow, J. R., Jaycox, L. H., & Anderson, M. (2002). Depression among youth in primary care models for delivering mental health services. *Child and Adolescent Psychiatric Clinics of North America*, 11(3), 477–497. https://doi.org/10.1016/S1056-4993(02)00006-8
- Awaluddin, S. M., Ibrahim Wong, N., Rodzlan Hasani, W. S., Omar, M. A., Mohd Yusoff, M. F., Nik Abd Rashid, N. R., & Aris, T. (2019). Methodology and Representativeness of the Adolescent Health Survey 2017 in Malaysia. *Asia-Pacific Journal of Public Health*, 31(8_suppl), 8S-17S. https://doi.org/10.1177/1010539519854884
- Azira, T. N., Zainudin, T., & Rahim, A. A. (2013). Child Patient and Consent to Medical Treatment in Malaysia: A Legal Perspective. *Journal of Global Peace and Conflict, 1*(1), 41–48. www.aripd.org/jgpc
- Bhatia, S. K. (2007). Childhood and adolescent depression. *American Academy of Family Physicians*, 65(9), 1679–1683. https://doi.org/10.1192/bjp.153.4.476
- Colizzi, M., Lasalvia, A., & Ruggeri, M. (2020). Prevention and early intervention in youth mental health: Is it time for a multidisciplinary and trans-diagnostic model for care? *International Journal of Mental Health Systems*, 14(1), 1–14. https://doi.org/10.1186/s13033-020-00356-9
- Dardas, L. A. (2019). Family functioning moderates the impact of depression treatment on adolescents' suicidal ideations. *Child and Adolescent Mental Health*, 24(3), 251–258. https://doi.org/10.1111/camh.12323
- Goldman, L. S., Nielsen, N. H., & Champion, H. C. (1999). Awareness, diagnosis, and treatment of depression. Journal of general internal medicine, 14(9), 569–580. https://doi.org/10.1046/j.1525-1497.1999.03478.x
- Hamrin, V., & Magorno, M. (2010). Assessment of adolescents for depression in the pediatric primary care setting. *Pediatric Nursing*, 36(2), 103–111.
- Ibrahim, N., Sidik, S. M., Kar, P. C., Mukhtar, F., Awang, H., Kiat, A. J., Osman, Z. J., & Ghaffar, S. F. A. (2017). Prevalence and predictors of depression and suicidal ideation among adolescents attending government secondary schools in Malaysia. *Medical Journal of Malaysia*, 72(4), 221–227.
- Institute for Public Health (IPH). (2012). National Health and Morbidity Survey (NHMS) 2011 (NMRR-10-757-6837) Volume III: Healthcare Demand and Out-of-Pocket Health Expenditure.
- IPH, NIH, & Ministry of Health Malaysia. (2019). National Health and Morbidity Survey (NHMS) 2019: NCDs Non-Communicable Diseases: Risk Factors and other Health Problems. In *Institute for Public Health, National Institutes of Health (NIH), Ministry of Health Malaysia* (Vol. 1). http://www.iku.gov.my/nhms-2019
- Jacobson, L., Churchill, R., Donovan, C., Garralda, E., & Fay, J. (2002). Tackling teenage turmoil: Primary care recognition and management of mental ill health during adolescence. *Family Practice*, 19(4), 401–409. https://doi.org/10.1093/fampra/19.4.401
- Jorm, A. F., Wright, A., & Morgan, A. J. (2007). National survey of the beliefs of Australian youth and their parents. *Most*, 187(10), 10–14.
- Kaur, J., Cheong, S. M., Mahadir Naidu, B., Kaur, G., Manickam, M. A., Mat Noor, M., Ibrahim, N., & Rosman, A. (2014).
 Prevalence and correlates of depression among adolescents in Malaysia. Asia-Pacific Journal of Public Health / Asia-Pacific Academic Consortium for Public Health, 26(5 Suppl). https://doi.org/10.1177/1010539514544356
- Kramer, T., & Garralda, E. (2000). Child and adolescent mental health practice in primary care. *Current Opinion in Psychiatry*, 8(4), 206–209. https://doi.org/10.1097/00001504-199507000-00002
- Macdonald, W., PhD, B., Bsc, S. B., Bower, P., Kramer, T., Mrcpsych, M., Sibbald, B., Msc, B., Garralda, E., Mphil, M., Frepsych, D., Harrington, R., & Frepsych, M. (2004). NURSING AND HEALTH CARE MANAGEMENT AND POLICY Primary mental health workers in child and adolescent mental health services. *Journal of Advanced Nursing*, 46(21), 78–87.
- Mason, E. B., Burkhart, K., & Lazebnik, R. (2019). Adolescent Stress Management in a Primary Care Clinic. *Journal of Pediatric Health Care*, 33(2), 178–185. https://doi.org/10.1016/j.pedhc.2018.08.001

- Meredith, L. S., Stein, B. D., Paddock, S. M., Jaycox, L. H., Quinn, V. P., Chandra, A., & Burnam, A. (2009). Perceived barriers to treatment for adolescent depression. *Medical Care*, 47(6), 677–685. https://doi.org/10.1097/MLR.0b013e318190d46b Ministry of Health Malaysia. (2020). *NATIONAL STRATEGIC PLAN FORM MENTAL HEALTH* (2020-2025).
- Nebhinani, N., & Jain, S. (2019). Adolescent mental health: Issues, challenges, and solutions. *Annals of Indian Psychiatry*, 3(1), 4. https://doi.org/10.4103/aip.aip_24_19
- Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *Lancet*, 370(9590), 859–877. https://doi.org/10.1016/S0140-6736(07)61238-0
- Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G., & Waite, P. (2021). Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *European Child and Adolescent Psychiatry*, 30(2), 183–211. https://doi.org/10.1007/s00787-019-01469-4
- Richardson, L. P., Russo, J. E., Lozano, P., McCauley, E., & Katon, W. (2010). Factors Associated with Detection and Receipt of Treatment for Youth with Depression and Anxiety Disorders. *Academic Pediatrics*, 10(1), 36–40. https://doi.org/10.1016/j.acap.2009.09.011
- Smith, G. L., & McGuinness, T. M. (2014). Adolescent Psychosocial Assessment.
- Stanard, R. P. (2000). Copyright © 1999. All rights reserved.
- UNICEF. (2022). Strengthening Mental Health and Psychosocial Support in 2021. https://www.unhcr.org/602b94e37/strengthening-mental-health-psychosocial-support-2021-pdf
- Weersing, V. R., & Brent, D. A. (2006). Cognitive Behavioral Therapy for Depression in Youth. *Child and Adolescent Psychiatric Clinics of North America*, 15(4), 939–957. https://doi.org/10.1016/j.chc.2006.05.008
- WHO. (2014). World's Adolescents: A second chance in the second decade. Geneva, World Health Organization Department of Noncommunicable disease surveillance. (2014). World Health Organization, 3–6. https://www.who.int/maternal_child_adolescent/topics/adolescence/second-decade/en/
- WHO. (2021). Adolescent mental health. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health