School Health Program
Section 3: Mental Health and Behavioural Problems

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Taken reference from Lee A., Ho M., Keung MW., Wong KK (2009). Chapter 3 Section I Part 3 c.: Management of Chronic Conditions for Sudents, Chapter 3 Section II Part 3: Prevetnive Services. In: Lee, Ho Keung and Wong (Eds) *Assessment of Dietary Pattern and Nutritional Status in Macao School Children.* Full report in Chinese (105 pages) with Summary Report in English & Chinese, Centre for Health Education and Health Promotion, School of Public Health and Primary Care, The Chinese University of Hong Kong, Oct 2009. **http://www.dsej.gov.mo/~webdsej/www/grp_db/dsejdoc_20091020_e.pdf?sid=&pt=http://&ip=&searchstyle=&clearorder=&time=1256356058&**

Mental and behavioural problems

Principles of management

The management of emotional problems is complex requiring multi-disciplinary approach. The key function role of school health professionals is to be aware of level of risk associated the emotional problem so they can observe whether the students are under appropriate care. They should also be able to detect early symptoms and signs of mental health problems such as depression and anxiety and also understanding of management approach so school health professionals would facilitate the management as far as possible.

This section provides a summary account how to categories student with mental health into different level of risk and complexity and also the diagnostic features of anxiety and depression. This section is NOT aimed to train school health professionals to provide comprehensive management of students with mental health problems but facilitate the management. For behavioural problems, school health professionals would refer to a recent publication to work with parents in helping children with different types of behavioural problems (Hong Kong Health Education and Promotion Foundation, 2010).

Categorization of risk and complexity of mental health problems

The mental health problems would be categorized into different levels of risk based on level of distress (Lee, 2009):

Low risk- tolerable level of distress

Medium risk- life functioning is significantly affected

High risk- risk of significant harm to self and others, i.e., suicide or violence

The mental health problem would also be categorized into different level of complexity with low level of complexity resulting from adjustment reaction to high level of complexity with co-morbidities and strong family history.

Level of complexity:

Low level of complexity: adjustment reactions usually improved within weeks or months with support from family, family doctors and local community services and usually without formal treatment.

Medium level of complexity: mental health problems such as depression, phobia, problems usually only improve very slowly if at all, without treatment. Usually requires psycho-social and pharmacotherapy treatments of demonstrated effectiveness.

High level of complexity: long-standing depression, dysthymia, co-morbidities, more than one family member with mental problems, domestic violence, repetitive self harm behaviours.

ACTION: How would school health professionals facilitate management based on risk and complexity

School health professional would advise students and parents how to seek further help after classifying their risk and complexity (Table 1).

- classified as high risk or high complexity, referral to specialists is needed and shared care with family physicians with structured training in counselling and management of

mental health problems

- classified as low risk and low complexity, family physicians with basic training in counselling and supported by counsellor OR family physicians with structured training in counselling and management of mental health problems would manage mental health problems in community.
- classified as low risk and medium complexity, or low complexity and medium risk, family physicians with structured training in counselling and management of mental health problems supported by specialist counsellor OR family physicians with basic training in counselling and management of mental health problems working together with specialist counsellor is needed
- classified as medium complexity and medium risk, one needs to have family physicians with structured training in counselling and management of mental health problems working together with specialist counsellor.

Figure 1 outlines how to identify depression among children and adolescents using DUMPS by Carlson (2000). Figure 2 provides a flowchart of mental health assessment in school setting. School health professionals together with students' family doctors need to assess the community resources available for counsellors, level of training of family doctors in mental health as well as the risk and complexity of the cases to decide whether psychiatric referral is needed.

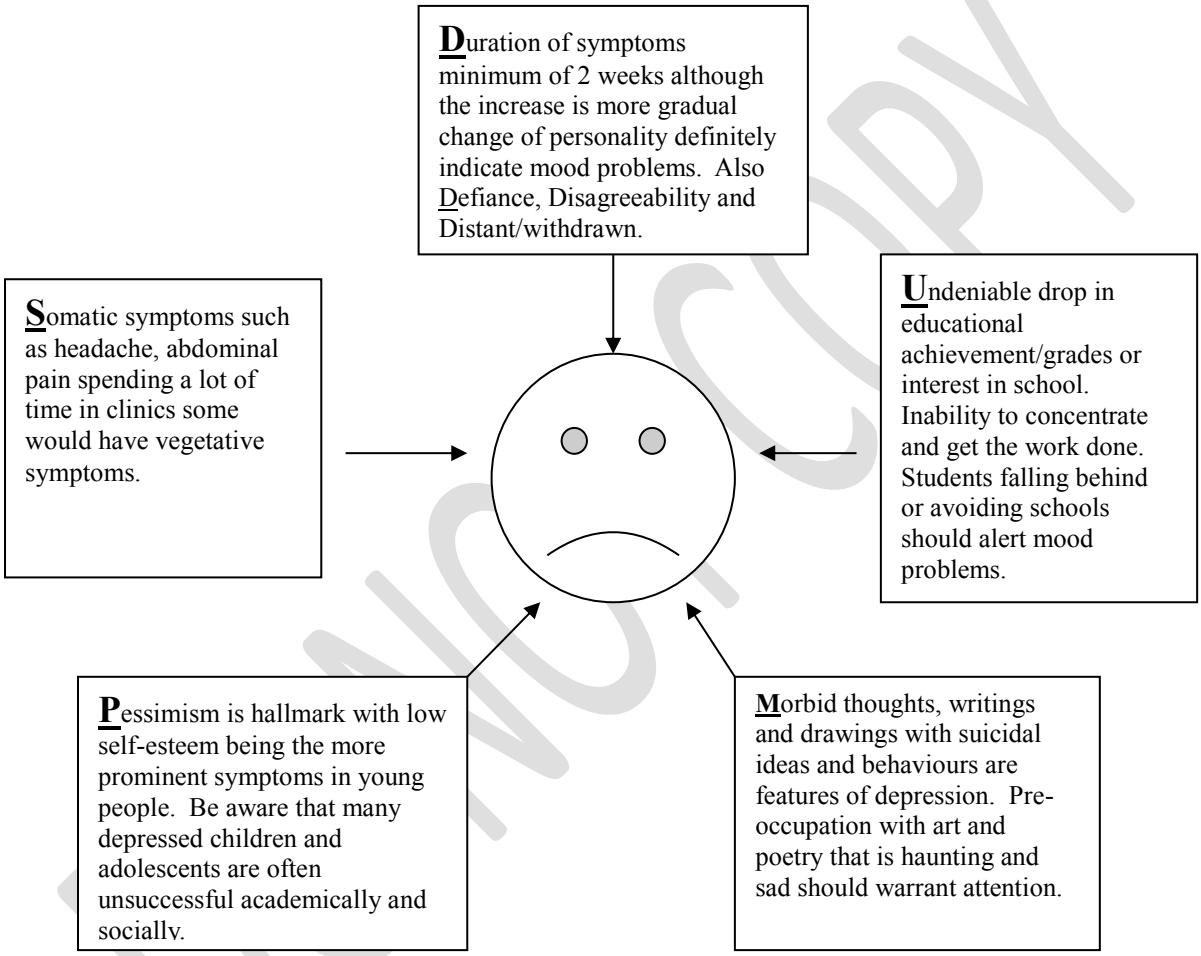
Table 1. Management gird for mental health problems according to level of risk and complexity

Level of Risk/ Complexity of problems	Low Complexity	Medium Complexity	High Complexity
Low risk	**1**, *3* or **2**	**2**, *4* or **1**, **4**	**5, 2, 4**
Medium risk	**2**, *4* or **1**, **4**	**2, 4**	**5, 4, 2**
High risk	**5, 4, 2**	**5, 4, 2**	**5, 4, 2**

Legend for management by:
1: Family physician with basic training in counselling and basic skills in managing psychosocial problems
2: Family physician with structured training in counselling and management of psychosocial problems
3: Generic counsellor or trained self-help group facilitators
4: Specialist counsellors such as clinical psychologists or specially trained social workers/counsellors
5: Specialist in mental health services
Bold means joint care and italic means supporting services

Figure 1. How to recognise the diagnostic features of depression in children and adolescents

DUMPS represents five of the criteria for diagnosis of depression in children and adolescents (Carlson, 2000).



How to recognise the diagnostic features of Anxiety

Somatic manifestation

- Cardiovascular – palpitation, chest pain, fainting, flushing, sweating
- Respiratory – shortness of breath, hyperventilation
- Alimentary – choking, lump in throat, dry mouth, nausea/vomiting, diarrhea
- Neurological – dizziness, headache, numbness
- Musculoskeletal – muscle ache, muscle tension, tremor, restless

Somatic manifestation of prolonged anxiety

- Tiredness
- Being easily startled
- Irritable
- Difficulty concentrating
- Constipation or diarrhea
- Urinary frequency
- Difficulty falling asleep or staying asleep
- Feeling depressed
- Feeling on edge

General principles of management

Psychological treatment includes:

Education approach

1. Psycho-education is educating the patients proper interpretation of their problems with explanation of problems
2. Motivational interviewing aims to identify pathways to cope with the problems (Rollnick et al, 2010)

Interpersonal relationship

1. Family therapy looks at the family dynamics to resolve the stressors and strengthen the skills in building relationship
2. Interpersonal therapy resolve stressors with significant others in person's life
3. Narrative therapy reviews the evolution of current problems and the contributors to current problem, and reviewing possible opportunities and threats to resolve the issues.

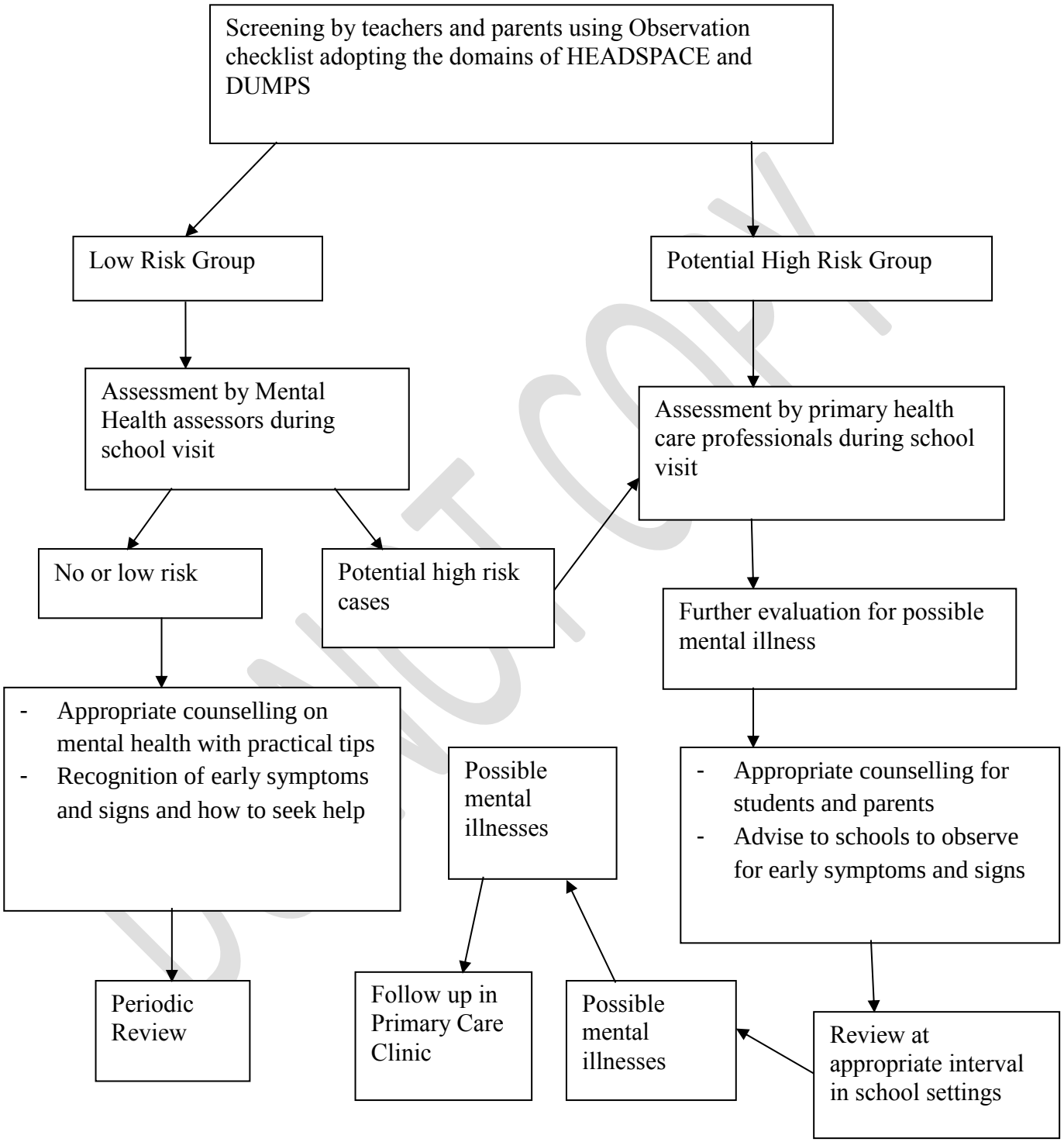
Cognitive behaviour therapy

1. Cognitive part is challenging the negative thinking of patient and helps the patient to identify the thoughts causing depressed moods. It is restructuring of patient's attitudes towards life challenges
2. Behavioural part is based on learning theory to modify behaviour with active scheduling.
3. Structured problem solving is helping patients to develop solutions to their problems. It is not providing the solutions but assist the patient in recognizing the relationship between problems in life and symptoms, and support to identify the potential solution and implementation.

Medication

It is best to try psychological treatment first and if not improved within 4-6 weeks then medication is considered (NICE, 2005). Anti-depressant can be offered in conjunction with psychological treatment and should not be initiated for those adolescents with mild depression (NICE, 2005). Fluoxetine is the usual drug of choice for adolescents (Rowe, 2004). Guidelines in United Kingdom recommend citalopram or sertraline as second line. The starting does should be low and increased gradually until therapeutic level is achieved.

Figure 2: Mental Health Assessment for students



Preventing severe or recurrent depression and suicide

Prevention of self-harm

Self harm is strong predictor for suicide ideation and attempts (Lee et al, 2009). Most self harm in adolescents inflicts little harm and does not come to attention of medical services (Hawton and James, 2009). Therefore school health professionals play a significant role in mental health promotion of adolescents to prevent self harm behaviours and avoid further attempts.

School health professionals should be alert of those students at risk by understanding the reasons underlying self harm, problems preceding self harm, factors associated with repeated self harm, features of self harm leading to high suicidal intent (Box 1), assessment of adolescent with self harm behaviours and management options (Hawton and James, 2007) (Box 2).

Box 1. Reasons and risks for self-harm behaviours

Possible reasons underlying self harm:

- to die
- to escape from unbearable anguish
- to change behaviour of others
- to escape from a situation
- to show desperation to others
- to change the behaviour of others
- to get back at other people or make them feeling guilty
- to gain relief from tension
- to seek help

Problems preceding self harm:

- Difficulties with family
- Problems at work or school
- Relationship problems (siblings, parents, partners, peers)
- Ill health
- Depression
- Bullying
- Low self esteem
- Substance misuse
- Sexual problems
- Interpersonal crisis (loss of close member of family or close friends)

- Poor school performance

Factors associated with repeat self harm:

- Previous self harm
- Personality problems
- Depression
- Misuse of drugs and alcohols
- Chronic psycho-social problems and behavioural problems
- Problems with family relationship
- Social isolation
- Poor school record

Features of self harm suggesting high suicidal intent:

- Conducted in isolation
- Timing of harmful act
- Plans to avoid being discovered
- Preparation of the act with long period of consideration
- Leaving a note or message

Box 2. Assessment and Management of self-harm behaviours

Assessment of adolescents with self harm behaviour

- Factors surrounding the self harm
- Degree of suicidal attempts
- Concurrent problems
- Underlying psychiatric disorder
- Past history or family history
- Underlying or past psychiatric history
- Resources or support available to the adolescents
- Risk of repeat self harm
- Attitudes towards self help
- Family structure and relationship
- Recurrent family life event
- Circumstances of the event
- Family reaction and management of the problems

Management options for adolescents with self harm behaviour:

- Problems solving
- Cognitive behavioural therapy

- Treatment of existing psychiatric problems
- Treatment of substance abuse
- Management of anger or emotional outburst
- Family therapy (problem solving)
- Group therapy (problem solving, cognitive behavioural therapy, management of development problems and emotional problems)

References

Carlson, G.A. (2000). The challenge of diagnosing depression in childhood and adolescence. *Journal of Affective Disorders*, *61,* S3-S8.

Hawson K, James A (2005). ABC of adolescence: Suicide and deliberate self harm in young people. *BMJ* 330: 891-894.

Hong Kong Health Education and Health Promotion Foundation (HEP) (2010). 香港健康促進及教育協會 (2010)。*《打開孩子心窗－教師手冊》。香港：香港健康促進及教育協會。* ISSN: 978-988-19208-1-2.

Lee A (2009). Common Adolescence Health Problems in Community. In Yang BF, Lee A, Zhu SZ *Handbook for Primary Care Practitioners: MIMS Primary Care Clinic Series*. CMP Medica Pacific Ltd. ISSN 2073-8986.

Lee A., Wong SYS., Tsang KK., Ho GSM., Wong CW., Cheng F (2009). Understanding of suicidality and correlates amongst Chinese secondary students in Hong Kong. *Health Promotion International* 24(2): 156-165.

National Institute for Health and Clinical Excellence (2005). *Depression in children and young people: identification and management in primary, community and secondary care.* Clinical Guideline 28 By national Collaborating Centre for Mental Health. London: National Institute for Health and Clinical Excellence.

Rollnick S, Butler CC, Kinnersley P, Gregory J, Mash B. Motivational Interviewing *BMJ* 2010;340:c1900

Rowe L (2005). This summer, start a small social revolution. *Aus Fam Phy,* 34(1-2): 11-12.