Chapter 12

# Mental health

**Learning objectives**

You will be able to gain proper understanding and explain:

- The concept and development of the mind from biological, mental/psychological, and social aspects.
- Mental health, psychological conflicts and defense mechanisms, the mind-body relationship and the stress theory, and stressful events. And by taking these factors into account, you will also be able to consider ways to cope with stress and social support.
- Cambodia's challenges in mental health and consider ways to address those challenges.
- How to listen to children with a supportive and receptive attitude.

This chapter provides an overview of mental health issues in Cambodia. It first describes ways to understand the mind and theories of the development of the mind that provide a basis for considering mental health, then explains the definition of mental health by the World Health Organization (WHO), the stress theory, and contemporary mental health challenges in Cambodia.

## 1. Concept and development of the mind and mental health

### 1) Three viewpoints on the mind

What is the mind? Does the mind really exist in the first place? Is it an illusion created by the brain? We consider what the mind is by assuming three general aspects:

The first aspect sees the mind from **the perspective of biomedical psychiatry and brain science**. This perspective views the mind as brain functions. It considers that each of the various actions of the mind is controlled by the region that localizes it in the brain. It therefore assumes that mental illnesses/ disorders and poor health of the mind are caused by damage to, or is a dysfunction of, a certain brain region.

The second aspect, which is adopted in some fields including psychoanalysis, depth psychology, and counselling, **assumes the existence of "the mind"** to be something that cannot be understood objectively or with natural science, such as **unconsciousness** and a soul. This view believes that the accumulation of individual life experiences shapes the mind as a subjective world. It therefore assumes that mental illnesses/ disorders and poor health of the mind are greatly related to matters of one's way of life or life experiences, or those of one's subjective self-being.

In the third aspect, the mind **is understood as** not only a series of functions within the individual's brain/central nervous system and inner self but also a series of **functions in connections with people and interactions with the social environment**. Given the fact that the brain, unconsciousness, and soul function in response to stimulation through interaction with the surrounding environment, the mind appears to be something that does not work independently within the individual but rather is something that functions only when relationships with surroundings are brought into the individual. It also incorporates history and culture to shape itself. In other words, it is only in a dynamic interaction between the individual and the surrounding environment or history/culture that the mind works. This aspect therefore assumes that mental illnesses/ disorders and poor health of the mind are greatly related to issues of relationships or interactions with surroundings, or those of individual adaptation to the environment or history/culture.

As a matter of course, these three aspects of the mind are not independent but linked to each other. That is, the human mind, which is one phenomenon, is viewed from three aspects: the biological, mental/ psychological, and social aspects. The mind has a totality that integrates at least these three aspects. This means that in considering mental health, issues need to be viewed comprehensively from the biological aspect, which mainly includes the growth/development of the cerebral nervous system and other body parts, the mental/psychological aspect, which focuses on individuals' experiences and ways of life, and the social aspect, which consists primarily of interactions of individuals with the social relations surrounding them such as their family, school, local community, and nation, and the history/culture of their country or region.

### 2) Development of the mind

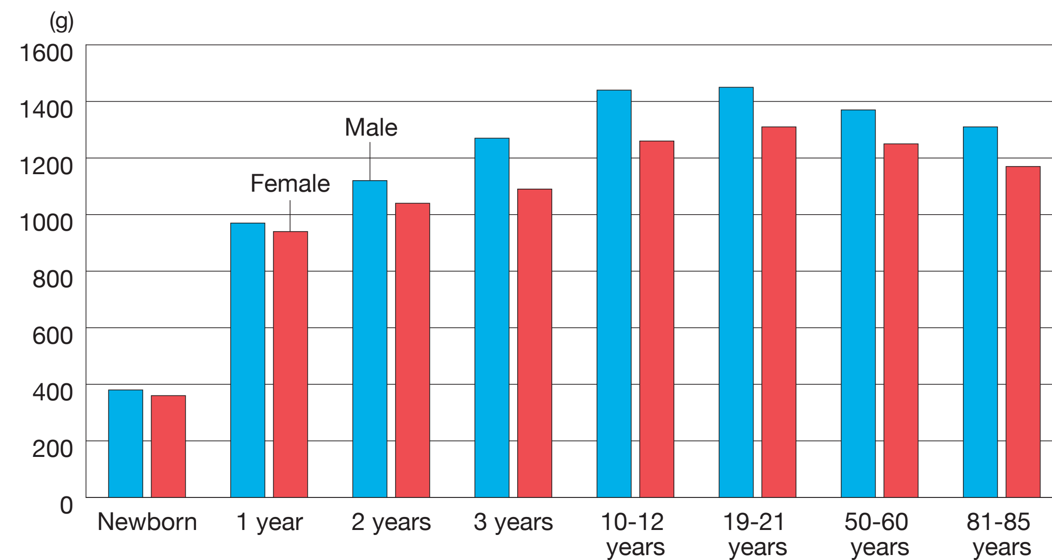
#### (1) Mental development in the biological aspect

As in the case of the mind, we examine the development of the mind from three aspects, namely, the biological, mental/psychological, and social aspects.

First, **the development of the mind in the biological aspect** is based on the growth/development of the cerebral nervous system. Thus, it is supported by physical growth and development as well. According to Dekaban and Sadowsky,[1] the brain already weighs 360 g in a newborn girl and 380 g in a newborn boy, as shown in Figure12.1. In one year from birth, it grows by approximately 1.6 times to 940 g for a girl and 970 g for a boy. The weight of the brain is known to reach 90% of that of an adult at around 6 years old. After that, the growth rate of the brain decreases, with the brain size reaching almost its peak at 19 to 21 years old. Due partly to differences in physical constitutions, brain weight differs between the sexes; it is 1310 g for women and 1450 g for men, indicating that men have a heavier brain than women. Brain weight starts to decrease in the late fifties as people age.

Meanwhile, concerning changes in synaptic density[2] in **the prefrontal cortex**, which is responsible for high-level human cognitive functions such as control of language and thinking, the density at 4 years after birth is known to reach double that of an adult. Synaptic pruning starts to progress slowly after around 4 years old, and intensely accelerates at around 14 to 16 years during adolescence. While networks of synapses used frequently remain, those not used are pruned and eliminated.

A higher synaptic density does not necessarily provide a better function; an overly complicated network cannot process information efficiently as it can be imagined from a labyrinthine information




This figure is created based on data obtained from "Dekaban, A.S. and Sadowsky, D., Changes in brain weights during the span of human life: relation of brain weights to body heights and body weights, Ann. Neurology, 4:345-356, 1978"

**Figure 12.1** Human brain weight by gender and age

network. Rather, as **synaptic pruning** progresses, information transmission becomes more efficient as it can be imagined from networks of major roads. Because this synaptic pruning occurs through the interaction between the body and the environment, the environment in which one has spent during adolescence is important. Adolescence, during which intense synaptic pruning occurs, is a period in which the brain structure is drastically reconstructed; therefore, it is considered to be a period in which mental disease is likely to develop (**susceptible period**) and deviant behaviors tend to occur. It is estimated that it takes about 25 years for **the frontal cortex** to mature to the adult level.

**Column:** What are the prefrontal cortex and synapses?

The brain can be broadly divided into the cerebrum, the cerebellum, and the brain stem (a collective term for the midbrain, the medulla oblongata, and the pons). Among these, the cerebrum is separated into four regions: the frontal lobe (with functions primarily related to thinking, judgment, and action), the parietal lobe (chiefly perception and sensation), the occipital lobe (vision), and the temporal lobe (hearing and memory). The prefrontal cortex is more developed in humans than in any other animal, accounting for approximately 30% of the frontal lobe and approximately 10% of the entire brain. The prefrontal cortex is responsible for cognitive functions necessary to live humanly, including reflecting/thinking, controlling actions and emotions, communicating, controlling memory, making decisions, solving problems, and acting with long-term goals.

In the nervous system, nerve cells (neurons) are responsible for information transmission. Nervous cells are not linked to each other but adjoin with gaps. A connection from the end of one nerve cell to the next nerve cell is called a synapse. A neurotransmitter is released in this gap, and information is transmitted from one nerve cell to another. For example, when the sympathetic nervous system is activated, noradrenaline is released, making the state of mind and body active, while the activation of the parasympathetic nervous system leads to secretion of acetylcholine, creating a relaxed state of the mind and body (see Chapter 2).

### (2) Mental development in the mental/psychological aspect

Although there are a variety of theories about **mental development in the mental/psychological aspect**, two theories can be presented as representatives: Piaget's theory of intellectual development and Erickson's life span development theory.

#### a. Piaget's theory of cognitive development (Figure 12.2)

According to the theory of cognitive development by **Jean Piaget** (a Swiss developmental psychologist, 1896-1980)[3,4], children aged from 0 to 2 are in **the sensorimotor stage**, in which the knowledge of the world around them is limited to what they can sense and touch. As the sense of their own existence begins to grow, they start to understand that things exist even though they cannot see, and also understand causal relationships between actions and consequences. Then, children aged from 2 to 7 are in **the preoperational stage**, in which they begin to think using images, and fantasies appear in their words and play. They enjoy using animism to think of natural phenomena such as an angry mountain. Their thinking is still self-oriented. The period from the ages from 7 to 11 is called **the concrete operational stage**, in which children begin to think logically and become less self-centered and able to see things from various aspects. For example, they acquire **the concept of conservation**, that is, the amount of water remains the same even after it is transferred from one container to another with a different shape. After this stage, from early adolescence, **the formal operational stage**, in which adult thinking is acquired, begins. In this stage, they acquire abstract thinking and begin to think about things according to visions and ideals without concrete experience. For example, they can think scientifically and make a hypothesis for estimation and compare the result with a fact to draw a conclusion.

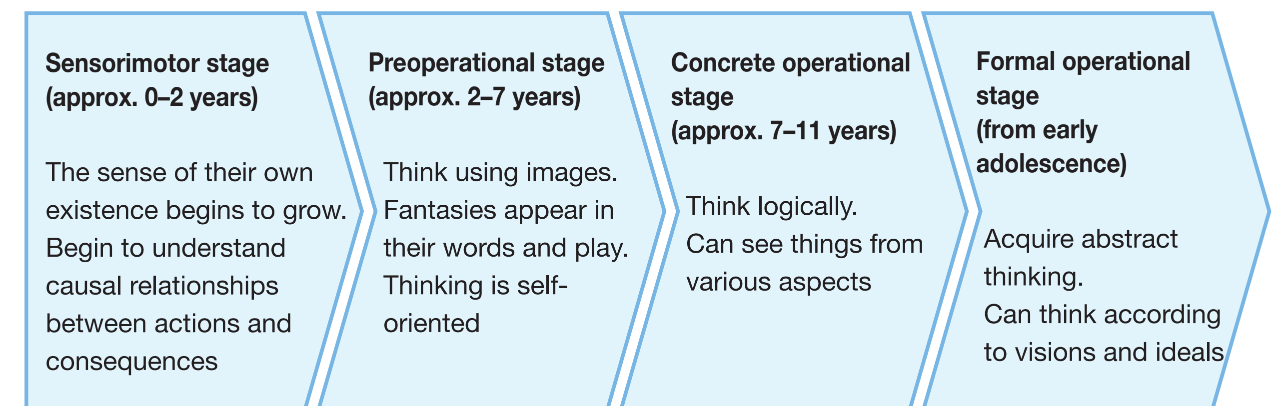



**Figure 12.2** Piaget's theory of cognitive development

#### b. Erickson's life span development theory

**Erik H. Erikson** (an American developmental psychologist and psychoanalyst born in Germany, 1902-1994)[5] divided the period of life from infancy to maturity into eight developmental stages by characterizing each stage according to specific skills acquired and behavioral tasks achieved, or **developmental tasks**. They are infancy (basic trust vs mistrust), early childhood (autonomy vs shame/doubt), preschool (initiative vs guilt), school age (industry vs inferiority), adolescence (identity establishment vs diffusion),

young adulthood (intimacy vs isolation), middle adulthood (generativity vs stagnation), and senium (integrity vs despair).

In Erikson's view, if the developmental tasks of each developmental stage are successfully achieved, the person will acquire a desirable nature, but if not, the person will emerge with an undesirable personality trait. For example, a main task for children of preschool age (about 3 to 4 years old) is to "do things on their own or depend on others," and then experience developmental crises, depending on whether they develop autonomy, or feel shame and doubt (e.g., a crisis over autonomous evacuation). If they can successfully achieve the task, they will acquire the spirit of independence and the sense of control, which will develop their will, but if they fail, they will lose confidence in their ability and feel ashamed of themselves. A task for children of early school age (about 4 to 5 years old) is whether they can do things on their own initiative, and they experience a crisis in which they face initiative or feelings of guilt about their negative attitude. If they successfully achieve it, they will develop a sense of purpose and the will to try new things, but if they fail, they will develop feelings of guilt or become passive. Children of late school age (about 5 to 12 years old) experience a crisis in which their ability to do things well is tested. After entering school, they begin to shift the focus of their social relations from the family to friends and teachers. If they play with friends, learn in class, do homework, and participate in school events well, they will come to feel confidence and pride in their ability, which will develop the industry necessary to work hard in school. Meanwhile, if they feel they do not do those things well enough compared with their friends, they will come to feel a sense of inferiority or a lack of confidence, which will increase the sense of maladjustment to school life. Through these experiences, a concept of self in school-age children is developed. Without question, support from parents, teachers, and friends, if provided to address the developmental tasks of this stage, will allow children to achieve the tasks more easily and their minds to develop even more healthily. It will also help address developmental tasks related to the establishment of identity in adolescence.

In adolescence (about 12 to 19 years old), children face the question of who they are and experience the major challenge of establishing identity. Once they obtain their roles in society through various experiences in studies, work, and social relations, they will be able to deepen self-understanding and become clearly conscious of themselves. Those who fail to find their roles or places to which they belong in society may become adults with vague self-consciousness. The development during and after young adulthood is not discussed in detail here.

#### (3) Development of the mind in the social aspect

Lastly, we discuss theories about development of the mind through social relations. The individual's self-recognition of "who I am" does not exist without the existence of others. That is because one needs another person who is different from oneself in order to confirm one another existence. For example, for development of the mind in infancy, relationships between the infant and the caregiver and fostering environment are important. **Rene Spitz** (an American pediatric psychiatrist and psychoanalyst born in Vienna, 1887-1974)[6] discovered **hospitalism**, a phenomenon in which infants who are fostered in an institution away from their parents for some reason experience a delay in physical, intellectual, emotional, or language development because of a lack of adequate stimulation from parents, that is, a physical contact and emotional relationship with parents; this phenomenon had already become an issue in the 19th century. Infants develop their mind by interacting with their caregiver and fostering environment through the body.

The environment with which they interact is, according to a model presented in Adolescent health 21st century[7], considered to be **a social ecosystem** consisting of schools, families, neighbourhood, and macro society. This social ecosystem affects human health throughout the entire life course from prior to birth to senium. Accordingly, the development of the human mind continues to be affected by the social ecosystem.

### 3) What is mental health?

According to the WHO, **mental health** is more than a condition free from mental disorder; it is the ability to think and learn and understand others' emotions and respond to them, as shown in the WHO's definition of health (see Chapter 1).[8] In addition, mental health is a condition in which an individual's physical, psychological, social, cultural, and spiritual health and other related factors are balanced, and in which the individual is harmonized with the environment.[8] Therefore, mental health is health with a totality that cannot be considered separately from things like physical, psychological, and social health. Moreover, it is health that is also inseparable from the environment.

The WHO also states that it is a condition in which an individual can smoothly exhibit his or her ability, cope with various stresses in daily life, and engage in work and studies to contribute to society. The WHO emphasizes the importance of mental health by describing that mental health is the foundation of abilities of groups and individuals that enables people to think humanly, communicate with each other, earn a living, and enjoy life.[9]

Given all of these things, mental health is considered to be a condition in which a person has the ability to live with independence (or sense of agency) as a human in this world and can display that ability. Thus, mental health in the developmental stage is viewed as a condition in which children can effectively exercise their abilities to, for example, think, learn, communicate, control behaviors and emotions, make decisions, and cope with stress in daily life according to their age (see the function of the prefrontal cortex), and at the same time, it is a condition in which those abilities can be enhanced to the highest levels that individuals can achieve because children are in the midst of growth and development.

### 4) Adolescents in the world and mental health

The WHO estimates that 10% to 20% of the adolescents in the world have mental health issues that are undiagnosed or untreated.[10] Furthermore, young people with mental health issues are victims of a human rights violations as a result of social exclusion, discrimination, and **stigma** (a negative, discriminatory attitude that sees a person's specific characteristics as something shameful, abominable, and stained), and tend to have learning difficulty, show dangerous behaviors, and have physical health issues. The most common cause of mental health issues in young people is depression.

## 2. Stress in daily life and mental health

### 1) Mechanism for protecting the mind

To maintain mental health, we must continue to protect the mind by coping with various stresses and conflicts in daily life. The world has entered a stage in which our health is threatened by various stresses caused by social life, which came after the threat of infectious disease and the spread of lifestyle diseases. This section explains about **the psychological defense mechanism** that enables us to cope with various frustrations and conflicts inherent to human life.

Austrian psychoanalyst **Sigmund Freud** first proposed the defense mechanism, and Anna Freud (a daughter of Freud) developed it. Freud believed that the human mind consists of three layers: **superego, ego, and id** (es, unconsciousness). The superego is a sociocultural moral code that is internalized through, for example, parental discipline, and represents the mind consisting mainly of conscience, which takes actions by judging norms, morals, and right and wrong, while the id represents the mind of instinctive desires and drives, emotions, and the accumulation of past experiences. The ego represents the defensive function of the mind that receives moral requests from the superego (e.g., prohibition, ideals, and consideration for others), and desires and drives as well as emotions from the id (Freud attached particular importance to sexual desire and drive), experiences a conflict between the superego and the id, and seeks for reality adaptation by coordinating with the reality of the outside world.

**The psychological defense mechanism** is the action of the mind to mitigate unpleasant emotional experiences such as anxiety, depression, guilt, and shame that are caused when the ego is exposed to the instinctive desires and drives as well as emotions of the id, and is the unconscious action of the mind by which the ego attempts to resolve the crisis and readapt to reality.[11] In general, the defense mechanism is the means that the ego or the self uses to protect itself from desires that it wants to reject and unpleasant emotions and notions, and is a normal action of the mind that everyone experiences. However, if the defense mechanism is excessive or inadequate, it can lead to social maladjustment, causing problematic behavior or impairing the health of the mind and body.

The most basic example of the psychological defense mechanism is **repression**. It is the action of the ego that unconsciously excludes desires that it wants to reject (e.g., sexual desire), unpleasant notions and emotions (e.g., hostility), and threatening experiences from consciousness and puts a lid on them so that they will not enter the consciousness.[12] The id is assumed to be an unconscious space to store these unpleasant things through repression. Although repression can give a temporary escape from unpleasantness, the memory of a very difficult experience may enter the consciousness as an unexplained anxiety later, causing damage to mental health. Or it may appear as physical symptoms such as the inability to speak, walk, or sleep, despite no physical dysfunctions.

Another example of the defense mechanism against unacceptable notions, emotions, thoughts, and memories of experiences is **isolation**. It is the action of the mind that attempts to separate those unacceptable things from oneself and keeps them away. Unbearably difficult experiences may be confined so as not to be remembered, which is called dissociative amnesia.

Meanwhile, the psychological defense mechanism has not only unhealthy responses but also healthy or mature ones (e.g., altruism, humour, sublimation, and suppression).

**Column: Various emotions and the control of emotions**

A person has various emotions. According to the classical theory of emotional development, a person first acquires emotions of pleasantness and unpleasantness in infancy, and pleasantness is divided into joy and affection while unpleasantness is divided into anger and hatred; a person develops more complicated emotions with age. It has been said that the basic elements of emotions develop by 2 years of age and emotions become as various as those of adults by 5 years of age. However, recent studies point out that emotions such as joy, anger, and fear emerge as early as infancy.

Emotions themselves cannot necessarily be classified into good and bad ones, and there is no need to deny any emotion. Meanwhile, positive emotions such as enjoyment, joy, affection, trust, happiness, and surprise are easy to accept, but negative emotions including anger, jealousy, fear, conflict, hatred, sorrow, and shame are hard to accept. Thus, if negative emotions become excessive, they can result in problems by causing antisocial behavior such as harming oneself or others. One of the mechanisms of the mind that controls these negative emotions is the psychological defense mechanism. Coping behavior, social support, mindfulness, and meditation, which are discussed later, are also psychosocial means to control negative emotions.

### 2) Relation between mind and body, and psychosocial stress

#### (1) Hans Selye's stress theory[13]

Stress is originally an engineering term that means "pressure" applied to an object. In the late 1930's, Hungarian-Canadian physiologist **Hans Selye** found that strong demand from the outside world disturbs homeostasis (see Chapter 2) and causes nonspecific, physiological responses to the living body (e.g., swelling of the adrenal cortex, atrophy of the thymus, spleen, and lymph node, and gastric and duodenal bleeding/ulcers) in experiments with rats, and published the stress theory.[13] Selye's stress theory was soon applied to humans, and research on the relation between stimulation from the psychosocial environment and human response began.

Environmental triggers that induce stress responses are stressors, which are largely classified into **physicochemical stressors** (e.g., noise, vibration, temperature, and chemical substances) and **psychosocial stressors** (e.g., human relations, events in school life, duties, characteristics and atmosphere of organizations including school, and economic conditions). In **psychosocial stressors**, there are **acute stressors**, which are **stressful life events**, and **chronic stressors**, which are **daily hassles**.

**Stressful life events** refer to events that cause changes to life and require efforts to adjust life and readapt. According to the scale that measures stressful life events,[14] the stress level of changes in life after marriage is set at 50 as the standard, and rates the death of a spouse at 100, which is the highest level. A survey of Cambodian university students[15] reported the three most common life events that they found difficult were as follows:

1. Marked decrease in your or your family's income
2. Frequent minor illness

3. Seeing poverty in Cambodia

Meanwhile, **daily hassles** refer to irritating or frustrating events that occur in interactions in one's daily life. In the daily life of university students, daily hassles may be an inability to understand classwork, excessive examinations and assignments including making reports, insufficient daily living expenses, or concerns about securing a job after graduation. The ten most common daily hassles for Cambodian university students[15] are reported as follows:

1. Too many things to do at once
2. Struggling to meet academic standards
3. A lot of responsibilities
4. Important decisions about your future career
5. Poor health of a friend
6. Hard effort to get ahead
7. Financial burden
8. Difficulties with transportation
9. Social conflict over smoking
10. Social isolation

There are two ways to harm health: one is through stressors caused by events that in turn cause major changes to life, and the other is through stressors attributed to accumulation of daily irritations. Both stressful life events and daily hassles vary depending on society, culture, and living conditions, and it is therefore necessary to consider what constitutes stressors that harm human health by taking into account the society, culture, and living conditions of each country and region (urban areas or remote mountainous areas), including Cambodia's group harmony-oriented culture, which is different from Western individualism.

In any case, if harmful stressors cannot be removed and exposure to them continues, **stress responses (strain)** occur. Stress responses appear largely in the physical/physiological aspect (physical symptoms including elevation of blood pressure, palpitation, and headache/abdominal pain), the psychological aspect (psychological symptoms including anxiety, depression, and irritation), and the behavioral aspect (aggression, withdrawal, tardiness/absence, and errors and accidents) (Table 12.1).

**Table 12.1** Examples of areas and types of stress responses

| Area of stress responses | Types of stress responses |
|---|---|
| Physical/physiological aspect | Elevation of blood pressure, malaise, dyspepsia, fatigability, sweating, insomnia, anorexia, palpitation, headache, abdominal pain, diarrhea, being prone to colds, substantial change in weight |
| Psychological aspect | Anxiety, tension, helplessness, depression, decrease of confidence/self-esteem, irritation, difficulty in concentrating, deterioration of memory/judgment, being passive |
| Behavioral aspect | Withdrawal, tardiness/ early leaving /absence, decrease of work efficiency and morale, increase of aggression, being pessimistic, being suspicious, diet refusal/overeating, tics, starting or increasing the amount of smoking/alcohol drinking/drug intake, decrease of cooperativeness, change in appearance, unsanitary behavior, increase of errors and accidents, suicide attempt/suicidal ideation/self-harm |

**Column: Mental health of Cambodian people**

In a study of Cambodians' psychological symptoms, conducted by Dubois, et al.[16] in the Kampong Cham province, 55% of the people reported experiences of violence and poverty related to the Khmer Rouge, and 42.4% had symptoms corresponding to the diagnosis of depression according to the DSM-4 standards while 53% and 7.3% had symptoms corresponding to the diagnoses of anxiety disorder and PTSD (Post-traumatic stress disorder), respectively. In addition, many people had multiple symptoms. The three most common stressful life events were lack of food and water, access to medical care, and housing. The frequency of PTSD was 28.4% in a study by De Jong, et al. [17] and 14% in a study by Sonis, et al.,[18] showing some difference due to study populations and periods. In addition, these studies are limited by simply applying the Western psychiatry diagnostic categories for PTSD, depression, and anxiety disorder to the stress experiences of Cambodian people.[19]

According to Nou,[15] Cambodian university students' major stressors can be classified into five categories, one of which is their difficulty in getting white-collar jobs after graduation, such as non-manual work, specialists, or engineering/development work. Moreover, social disparities that allow only rich students to get good jobs have become a stressor. The subsequent stressor is changes in life, including the death of or separation from family members, a decrease in income, and poverty and the uncertain future of Cambodian society. Others inclulde changes in society; Cambodia's political and social uncertainty have affected university students' daily life. The last is malnutrition resulting from environmental pollution (dust from unpaved roads) and poverty, which is reported to be a stressor that many university students suffer from. Further studies of life stressors are needed in the context of Cambodian life and society in detail.

The challenge of school mental health is to identify the stressors, stress responses, coping behaviors, supportive human relations, and a sense of control in the lives of elementary school, junior high school, and senior high school students in Cambodia.

### (2) Mechanism of the mind-body connection

The remarkable points about the stress theory are that it revealed that stimulation from the psychosocial environment can induce responses in the physical/physiological aspect and cause physical diseases, and so it created the concept of **psychosomatic disease**.

For example, if a human relation problem such as bullying, harassment, or discrimination occurs, people will recognize and evaluate it. If the stimulation persists and it is determined by the cognitive appraisal to be a threat that cannot be eliminated soon, it will become a stressor, leading to various emotional responses, autonomic nervous system excitation, transmission of this excitation throughout the whole body via synapses, and evoking the body's responses (see Chapter 2 for responses of the autonomic nervous system). The cognitive appraisal of a stressor causes excitation of the sympathetic

nervous system or the parasympathetic nervous system. A body's responses vary depending on the released neurotransmitter. Representative hormones that transmit stress information are **cortisol** and **adrenaline**, which transmit excitation of the sympathetic nervous system. If this stress condition becomes chronic, the body will soon be exhausted and unable to maintain homeostasis, resulting in the onset of disease.

However, not all stresses are necessarily harmful. Good stress is called **eustress** and is conceptually distinguished from the harmful stress **distress**. Eustress leads to fulfillment in life and a sense of accomplishment and is referred to as "the salt of life." It is a metaphor meaning that consuming it too much will do harm to health, but we cannot live without taking it.

**Column:** Stress hormones and happy hormone

Cortisol and adrenaline are major hormones released when the human body responds to stress. These hormones elevate blood pressure and prepare the body for fight or flight response (see Chapter 2). Cortisol is a steroid hormone released by the adrenal cortex. Depending on the amount of secretion, it increases blood pressure and blood glucose levels, resulting in, for example, a decline in immune function.

Meanwhile, when a joyful or good thing (eustress) happens, dopamine, which is known as "the pleasure hormone," is released. As a result, the person is motivated to make better things happen. Besides dopamine, there are serotonin (known as "the hormone of reassurance") and oxytocin (known as "the hormone of love").

**Column:** Psychosomatic disease

Psychosomatic disease is a physical disease, whose onset and course are affected by psychosocial stress, and in which organic or functional abnormalities are confirmed. To understand psychosomatic disease, the mind-body connection is important for explaining the relation between psychosocial stress and physical symptoms or physiological abnormalities. Representative psychosomatic diseases include irritable bowel syndrome, gastric ulcer, bronchial asthma, hyperventilation syndrome, essential hypertension, and headaches (e.g., tension-type headache and migraine). Note that physical symptoms complained of by patients with depression or schizophrenia are not included in psychosomatic disease.

**Column:** Manic defense

There are many types of defense mechanisms that protect the ego when the person feels psychological stress, ranging from **immature defense mechanisms** (e.g., isolation of affect, rationalization, denial, and somatization) that tend to lead to maladjustment and mental health disorder to **mature defense mechanisms** (e.g., humour and suppression).[20]

We introduce manic defense here. It is a behavior intended to hide from others by forcing oneself to be cheerful, to laugh, or become excited as if nothing happened, in order to divert the mind from anxiety, depression, loneliness, and despair that result from psychosocial stressful events such as unpleasant or disappointing events and the experience of being hurt. However, such defense will not last long, and in fact, the person will soon be exhausted and feel seriously depressed. To avoid this situation, it is important to have someone reliable who will listen to and accept.

### (3) Coping behavior toward, social support for, and a sense of control over stress

As a means to protect health of the mind and body from psychological conflicts and psychosocial stress, there are coping behaviors and social support in addition to psychological defense mechanisms.

#### a. Coping behavior

**Stress-coping behaviors** are actions and skills used to reduce threats, harmfulness, and stress responses that result from a stressor, and include **emotion-focused coping** that attempts to maintain the person's composure by controlling emotions (e.g., vent of emotions, resignation, and wishful thinking), **problem-focused coping** that tries to solve the problem (e.g., seeking for information and support and implementing solutions), and **cognitive appraisal-focused coping** that perceives the problem differently (e.g., redefinition and denial of the problem).

#### b. Social support

It is support that is provided and received in social relations. Although there are several classification methods, it can roughly be divided into emotional support, instrumental support, and appraisal support. **Emotional support** includes approaches to the emotional aspect, such as sympathetic understanding and sharing an experience. **Instrumental support** further includes **support by means, i.e. aid**, which is a direct intervention or support to solve the problem (e.g., lending money and giving assistance), and **informational support**, which is an indirect support through advice and information provision. Plus, there is **appraisal support**, which works to change perspectives and views on stressful events, or provides a positive appraisal.

Stress coping behaviors are the actions that people take when a stressor occurs. Social support, on the other hand, includes various types of support, such as support related to the occurrence of the stressor and support for coping with the stressful situation. Thus, social support has the effect of preventing the occurrence of stressors, reducing stress levels when stressors occur and people feel stressed, and providing support when stress responses occur. Therefore, in order to maintain mental health, it is important to establish reliable relationships with people who can provide support (e.g., family members/relatives, friends, and teachers) and to learn about socially provided programs and services. In Cambodia, however, the challenge is a lack of facilities, services, and programs that can provide mental health care.

### c. Sense of control[21]

The key to overcoming difficult situations is to have the belief that one can overcome them by changing the surrounding circumstances, or the belief that one can overcome them by receiving the surrounding circumstances and adjusting them toward a solution. These senses are called **senses of control**. These senses of control are important psychological resources to adapt to developmental challenges and changes in each age group, and have positive effects on aspects of life, including health, studies, and work. The former self-initiated sense of control is **the primary sense of control**, which is emphasized in Western societies. Meanwhile, the harmonious sense of control is **the secondary sense of control**, which is a sense of control widely shared by people in East Asia. In the Asian cultural sphere, in order to cope with stressful events, it is important not only to aim to change the circumstances to meet one's desires but also to try to adapt oneself to the circumstances to reach a solution in which both are harmonized.

**Column:** The Western mind and the Asian mind

The concepts of the mind and mental health in psychology and psychiatry have been theorized on the basis of traditional Western social culture and modern Western science. Careful consideration must be given to determine whether this Western concept of the mind can universally be applied to non-Western social cultures, such as those in Asia, India, the Middle East, and Africa. Asia is divided into six areas, i.e., East Asia, Southeast Asia, North Asia, South Asia, West Asia, and Central Asia, and includes people who believe in religions representing various tenets of Buddhism, Islam, Hinduism, Judaism, and Christianity; therefore, it is better to think that the concepts of the mind and mental health based on Western values are different from those in Asian countries.

Take **mindfulness** as an example, which has recently been a topic of discussion. It originates from sati, a Pali word used in Theravada Buddhism. In Buddhism, a Western self-centered self-consciousness, which focuses on "me" separated from others (e.g., people and the environment), is denied, and instead of reducing all events to their elements and viewing them separately, people recognize that all events are mutually linked to take place and value the overall harmony. They concentrate on "the present moment" "as it is" with an unbiased mind through specific Buddhist practices, including meditation, and strive to reach "a constantly calm behavior (state) of the mind." The concepts of the ego and the mind in Asian Buddhist thought are different from those in the West, and the healthy state of the mind also widely differs from the WHO's concept based on a demonstration of individuals' abilities as described above.

Note that there is mindfulness as a method for reducing stress, which is separated from religious significance and practiced for therapeutic effects. Nevertheless, mindfulness is something that aims for not only individuals' inner peace but also the peace of the group or the society that surrounds individuals.



# 3. Mental health challenges in Cambodia

## 1) Externalizing problems and internalizing problems

According to Achenbach, et al., the most common categories describing behavior disorders in psychopathological studies are "**internalizing**," in which behavioral problems appear internally, and "**externalizing**," in which they are expressed externally[22]. The American Psychiatric Association's diagnosis manual also explains that classifying behavior disorders broadly like this is more useful than looking at individual behavior disorders. For example, internalized problem behaviors include anxiety, depression, loneliness/sorrow, despair, suicidal ideation, physical symptoms, and withdrawal, and these represent a group of behaviors that are neurotic and excessively suppressed. It has been pointed out that these are frequently seen among girls in elementary, junior high, and high schools and increase their risks of dropping out of school, using drugs and suicide[23]. Meanwhile, externalized problem behaviors include destructive/aggressive/antisocial behaviors (i.e., acts of violating rules and laws, such as fights, subversive activities, thefts, and telling lies) and hyperactive behaviors, and these represent a state in which behavioral suppression is insufficient[24]. Note that externalized and internalized problem behaviors coexist and cannot be considered separately because anxiety or depression may be hidden behind antisocial behaviors.[23,24]

A study of Cambodian-Americans[25] states that, although the use of official mental health services as well as guidance from parents, relatives, friends, and other people are necessary to address externalized problems (a 14-year-old boy's alcohol drinking in this research) and internalized problems (11-year-old boy's depression), it is effective for coping with externalized problems to administer punishment, teach manners, and place children in a training facility to discipline them. This view requires attention because it can create a foundation that allows for physical punishment. To address internalized problems, meanwhile, the study recommends letting children do what they like to do and spend their time as they please. It is necessary to develop coping methods that are effective in Cambodia by promoting the understanding of mental health through health education while taking into account Cambodian peoples' beliefs.

## 2) Post Traumatic Stress Disorder (PTSD) in relation to the Khmer Rouge and 2nd generation PTSD

It is estimated that approximately one-fifth (approx. 2 million people) of the Cambodian population died because of torture, execution, forced labour, hunger, or disease during the Khmer Rouge era (1975–1979). Even today, about 40 years later, some of the survivors and their children's generation are still suffering from **PTSD**, physical symptoms, and social maladjustment. A special tribunal, which started in 2006, is ongoing, and there are concerns over what influences the tribunal can have on Cambodian people. It is suspected that the tribunal may cause the people to reexperience past hardships, retraumatizing those who are seized by anger and a desire for revenge, which may lead to increasing the prevalence of PTSD among them. In previous studies, the prevalence of PTSD widely ranges from 7% to 86% among different studies.[26]

Hinton, et al.[27] created the Cambodian Symptom and Syndrome Inventory (CSSI), a questionnaire sensitive to Cambodian culture to measure psychological health in order to assess the influences of psychic trauma experiences on Cambodian refugees who fled the massacre perpetrated by the Khmer Rouge (Table 12.2). It is a questionnaire that asks how much they suffered from these symptoms in the past four weeks. Respondents are requested to choose from among five ratings: 0 (not at all), 1 (a little bit), 2 (moderately), 3 (quite a bit), and 4 (extremely). It is shown that among these symptoms, the symptom of "13. thinking too much" (kut caraeum) among the "syndromes" is a key indicator of distress, and those with higher scores of this indicator tend to have higher DSM-IV PTSD scores. People with this symptom think too much about upsetting topics, past traumatic events, and death of/separation from loved ones. "Kut caraeum" may lead to physical symptoms such as headaches, dizziness, "wind attacks," depletion of bodily energy, heart weakness, and memory loss.

**Table 12.2** Contents of the Cambodian symptom and syndrome inventory (CSSI)

| Somatic symptoms | Syndromes |
|---|---|
| 1. Dizziness | **Somatic-focused syndromes** |
| 2. Standing up and feeling dizzy | 1. Khyâl attacks |
| 3. Blurry vision | 2. Standing up and feeling poorly to the point you feared fainting, khyâl overload, or heart attack |
| 4. Tinnitus | 3. Neck soreness to the point you feared the neck vessels would burst |
| 5. Headache | 4. "Heart weakness" |
| 6. Neck soreness | 5. Sputum moving upward and causing you to feel you couldn't breathe or might have a heart arrest |
| 7. Palpitations | 6. Khyâl hitting up from your stomach, making you fear you might die of asphyxia |
| 8. Shortness of breath | 7. Fear of "death of the hands, death of the arms" (slap day slap ceung) |
| 9. Chest tightness | 8. Excessive inner hotness (kdaw khnong) |
| 10. Rising sputum | 9. Having a partial or full malaria attack |
| 11. Stomach bloating/discomfort | 10. Out of energy to the point you feared having a khyâl attack or dying from depletion |
| 12. Cold hands and feet | **Agoraphobia/motion-sickness syndromes** |
| 13. Numbness in the arms and feet | 11. "Poisoned by cars" (pul laan) |
| 14. Sore arms and legs | 12. "Poisoned by people" (pul meunuh) |
| 15. Trembling of the arms and legs | **Emotion-focused syndromes** |
| 16. Weakness | 13. "Thinking too much" |
| 17. Poor appetite | 14. Toxique |
| 18. Feeling of lightness in the body | **Cognitive-capacity syndrome** |
| | 15. Forgetfulness/mental distraction (phluc pheang) |
| | 16. Light in the body as if your soul was not in your body |
| | 17. Fear that someone has sent an ampuu into your body |
| | 18. Fear of having low spiritual luck (rieusuy), high bad luck (krueh) |
| | 19. "Ghost pushing you down" (sleep paralysis) |

This table cited from "Hinton et al., The relationship of PTSD to key somatic complaints and cultural syndromes among Cambodian refugees attending a psychiatric clinic: The Cambodian Somatic Symptom and Syndrome Inventory (CSSI). Transcultural Psychiatry. 50:347-370. 2013."
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**The 2nd generation PTSD** due to transgenerational trauma is a concept that considers PTSD as a result of traumatic events experienced by parents' generation affects their children, who did not directly experience those events, thus causing psychopathological symptoms. A study of Cambodian families has not clarified the mechanism of PTSD transmitted between generations but has shown that the higher the level of traumatic stress that a mother experienced in her life, the higher the daughter's PTSD symptom rating. Psychic trauma experiences in the Khmer Rouge era are transmitted from mothers to daughters, and therefore, not only caring for mothers suffering from PTSD but also providing mental health care for their children is an important issue for Cambodia.

## 3) Bullying, violence, and harassment

### a. Bullying

According to the 2013 Global School-based Student Health Survey (GSHS),[28] the percentages of elementary, junior high, and high school children who were **bullied** at least one day in the past 30 days in Cambodia were 22.4% for those aged 13 to 15 years and 22.3% for those aged 16 and 17 years, with no marked difference between the sexes. In this study, bullying was defined as follows: "Bullying occurs when a student or group of students say or do bad and unpleasant things to another student. It is also bullying when a student is teased a lot in an unpleasant way or when a student is left out of things on purpose. It is not bullying when two students of about the same strength or power argue or fight or when teasing is done in a friendly and fun way."

UNICEF Cambodia[29] defines these three points as characteristics of bullying: an intentional (malicious) act that causes physical or psychological pain; a patterned, repeated behavior; and an attack by a stronger child. It recommends parents and teachers observe children by paying attention to the points below so that they will not miss any signs of bullying.

i) Physical marks such as unexplained bruises, scratches, broken bones and healing wounds
ii) Fear of going to school or joining school events
iii) Being anxious, nervous or very vigilant
iv) Having few friends in school or outside of school
v) Losing friends suddenly or avoiding social situations
vi) Clothing, electronics or other personal belongings being lost or destroyed
vii) Often asking for money
viii) Low academic performance
ix) Absenteeism, or calling from school asking to go home
x) Trying to stay near adults
xi) Not sleeping well and having nightmares
xii) Complaining of headaches, stomach aches, or other physical ailments
xiii) Regularly distressed after spending time online or on their phone (without a reasonable explanation)
xiv) Becomes unusually secretive, especially when it comes to online activities
xv) Being aggressive or having angry outbursts

Recently, **cyber bullying** has become an issue not only in Cambodia but also around the world. The Mobile Phones and Internet Use in Cambodia 2016[30] reports that 48% of people access the internet or Facebook. In the meantime, the Digital 2021 Cambodia[31] estimates that 8.86 million (54.2%) of the country's population (16.83 million, as of January 2021) are internet users, indicating that about half of the total population use the internet. The spread of social media creates new forms of bullying, violence, and harassment. According to a five-week public-opinion poll conducted by UNICEF, 85.7% of Cambodian youths aged 15 to 25 years are exposed to the risks of online violence, cyberbullying, and digital harassment.[32] To address this situation, UNICEF has requested the Cambodian government develop new policies for protecting children from bullying and violence using cyber means such as SNS.

In UNICEF's study,[33] the definition of cyberbullying is as follows:

"Cyberbullying is bullying with the use of digital technologies. It can take place on social media, messaging platforms, gaming platforms, and mobile phones. It is repeated behavior, aimed at scaring, angering, or shaming those who are targeted. Examples include: spreading lies about or posting embarrassing photos of someone on social media, sending hurtful messages or threats via messaging platforms, impersonating someone and sending mean messages to others on their behalf."

The study points out that cyberbullying has an impact on children psychologically (feeling upset, embarrassed, stupid, even angry), emotionally (feeling ashamed or losing interest in the things you love), and physically (tired (loss of sleep), or experiencing symptoms like stomach aches and headaches).[33]

Although it is not easy to prevent bullying, it is important, first of all, for children to understand "what constitutes bullying" and not to blame themselves for being bullied. Children who are being bullied as well as those around them should say that bullying has occurred and tell adults. In addition, the adults and children around them need to create a safe classroom and school environment where bullying is not acceptable. In the current situation of most schools in Cambodia, the awareness and support of teachers and friends is essential as there is still no school counsellor. It is important to recognize that not only children who are being bullied but also those participating in bullying might be suffering from mental problems and seeking help.

### b. Violence against children by teachers

The 2013 Cambodia Violence against Children Study[34] reports increasing violence against children in Cambodia. With regard to children aged 13 to 17 years, the percentage of those who have experienced physical violence was 58.2% for boys and 61.1% for girls, and approximately 68% suffered violence for the first time between the ages of 6 and 11 years, that is, during their elementary school age. Outside homes, violence is used by teachers. Concerning physical violence used against girls aged 13 to 17 years, 58.6% of the girls suffered violence from male teachers and 20.5% from female teachers; as for boys of the same age, the percentages were 51.7% and 18.0%, respectively.

Bullying mentioned above as well as violence by adults are thought to be two of the most stressful life events to which children are exposed. UNICEF estimates that children who experience violence will be subject to long-term negative effects on their intellectual, physical, and emotional development, which can result in a decline in labor power in the future and an economic loss of US$168 million (accounting for 1.1% of the GDP in 2013), and points out that violence against children will cause substantial damage to Cambodian society[35]. In response, teachers have begun to receive training to learn educational methods that do not use violence in correcting children's behaviors and managing classes and how to build good relationships with children. Teachers in Cambodia are strongly required to serve as mentors of children and guide them in the right direction, build relationships in which children are respected, and understand different characteristics of children at different developmental stages (see Chapter 3).

## 4) Loneliness, anxiety, and depression

According to a study of people aged 21 and older across Cambodia, conducted using the Hopkins Symptom Checklist-25[36] in 2011, the percentage of people with high anxiety symptom scores (referred to as "anxiety") was 18.35% for men and 31.72% for women, which represented a statistically significant difference between the sexes; and the percentage of people with high depression symptom scores (referred to as "depression") also showed a difference between the sexes, with the percentages being 10.21% for men and 19.69% for women, indicating that the percentages of anxiety and depression are higher in women. Interestingly, in both psychological symptoms, no difference was found between urban and rural areas, but there was a difference with regards to educational background. The percentages of anxiety and depression were higher in those with lower education, and among those with no education, the percentages of anxiety and depression were 32.51% and 20.37%, respectively. In the general population, women with low education are presumed to be at high risk.

Meanwhile, in the results of the **GSHS-2013 Cambodia**, which surveyed elementary, junior high, and high school children, 49.0% "sometimes" feel **loneliness**, 4.8% feel it "most of the time," and 0.9% "always" feel it. This indicates that 54.7% of the children feel loneliness sometimes or more frequently. A comparison of this percentage with the GSHS results of the neighbouring countries Laos (32.8%) and Vietnam (44.5%) shows that the percentage of children who feel loneliness is higher in Cambodia by 10%–20%. However, there was no marked difference in the percentage of those who answered that the number of close friends is 0, which was 5.0% for Cambodia, 4.8% for Laos, and 5.5% for Vietnam. Loneliness itself is something that everyone sometimes feels and not a mental health issue. Nevertheless, Cambodian children, who feel loneliness more frequently than their counterparts in neighbouring countries, might be at higher risk of depression, anxiety, low self-esteem, sleep disorder, self-mutilation, and suicide.

The results of the GSHS-2013 Cambodia[28] also shows that 42.4% of the children "sometimes" had the experience of "being unable to sleep at night because of worries," 5.0% had it "most of the time," and 1.0% "always" had it. This distribution is similar to that of loneliness, and 48.4% of the children experienced sleeplessness because of worries sometimes or more frequently. In a study conducted in Laos using the same items, "sometimes" was 29.9%, "most of the time" was 3.9%, and "always" was 1.1%, which totaled 34.8%. This is lower than the percentage in Cambodia by approximately 15%. These results suggest that the mental health of Cambodian children is poorer than that of their counterparts in neighbouring countries.

## 5) Suicide attempts, suicide

**Suicide** not only takes the life of a person but also constitutes a public health issue that can have a deep influence on the family and people around the person, as well as the school and the region. The suicide rate (the number of people who committed suicide per 100,000 population) in Cambodia for men was 6.2 in 2000, which slowly increased to 8.0 in 2007 and then gradually decreased to 7.0 in 2019. The rate for women, meanwhile, decreased every year from 3.9 in 2000 to 2.8 in 2019 (**Figure 12.3**).[37] The 2019 global average suicide rates are 12.58 for men and 5.68 for women, and Cambodia's suicide rate appears to be substantially lower than the global level. However, there is a previous study that reported a high suicide rate of 13–44 per 100,000 population,[26] and this warrants a highly accurate epidemiological study of suicide and statistics.

Concerning suicidal ideation and suicide attempts of young people, the GSHS-2013 Cambodia[28] shows that the percentage of those who seriously considered committing suicide during the past year is 6.4%, those who made a suicide plan was 8.8%, and those who made a suicide attempt was 6.7%. These children are at high risk of committing suicide in the future.

There are many possible psychological circumstances that may push children into suicide. Such circumstances are as follows:

i) loneliness and isolation, which make them feel that they cannot trust anyone and are helpless;
ii) a feeling of worthlessness, which makes them think it is not worth living;
iii) unfocused intense anger because they cannot blame anyone for their sufferings and cannot solve them;
iv) an assumption that their sufferings will never end and a feeling of despair; and as a result,
v) psychological visual field constriction, which makes them preoccupied with suicide as the only solution.

As measures to counter suicide, there are **prevention** and **postvention**. Prevention means building relations with those who are close to children in daily life and who notice these changes; those who talk to them, and who are easy to talk to about their worries; and building relationships of trust with teachers. In many schools in Cambodia, systems that allow children to convey their worries, including allocation of health room teachers (like a school nurse) and school counsellors, are not in place, and therefore, it is necessary to train general teachers to listen to children receptively and supportively, as training to improve the quality of teachers.

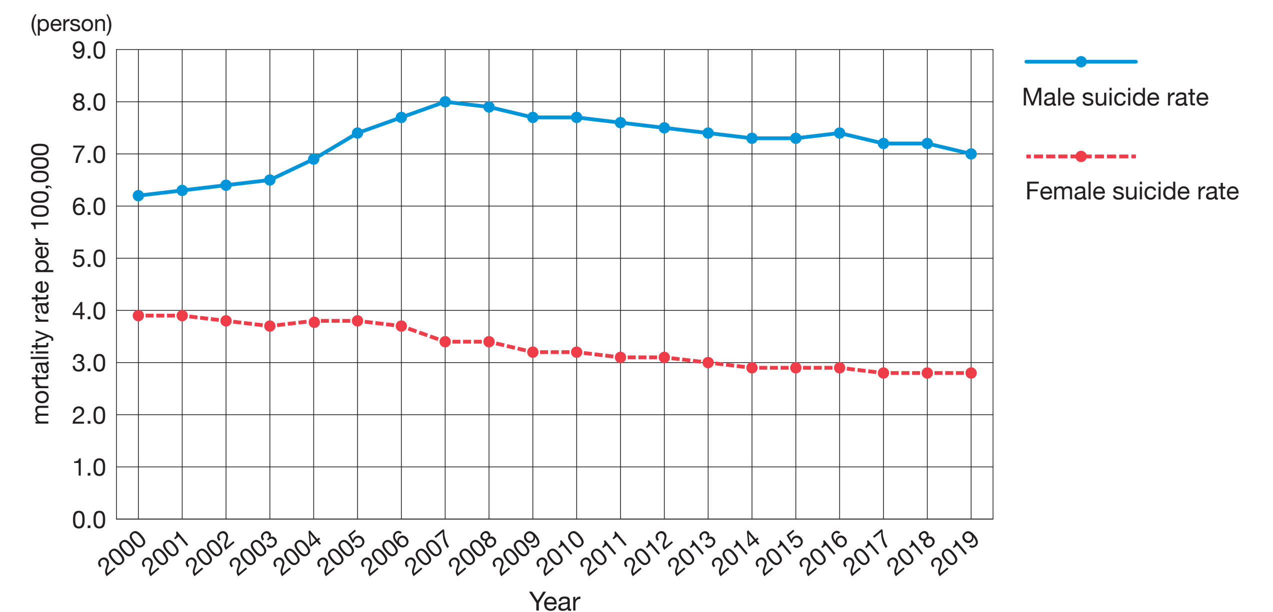
Meanwhile, because one person's suicide can trigger a chain reaction or cluster of suicide, postvention aims to carefully observe children who are shocked by someone's suicide and depressed, as well as those who are feeling guilty about someone's suicide, and to consult with them to create an atmosphere in which they can easily talk. A triggering suicide is the suicide of someone such as a celebrity, like an actor, a person of the same age with the same trouble, a family member, a boyfriend or girlfriend, or a close friend. The principal and teachers are required to deal with the family of the child who committed suicide, and students in the same school and their guardians. In dealing with these people, it is necessary not to glorify or criticize the suicide and to be considerate to prevent the family of the deceased from suffering the **stigma** of suicide.

In school classes, health education can be provided, which includes methods for coping with stress, how to send out an SOS and seek help, and learning the importance of life. In addition, one possible suicide prevention measure is to provide training for teachers so that they can learn how to listen to children and have a receptive attitude. It is also important to create a system that allows children to consult with adults in school, the community, and through SNS as an effort of society. At the same time, adults, including teachers and guardians, must pay careful attention to the fact that SNS may include information that induces suicide.

In suicide prevention measures, although individual measures are also important, the key is the **whole school approach**, in which the entire school considers the health of children as a whole and **creates a healthy and supportive school environment** (e.g., curriculums, school management policies, caring relationships, school culture and value, and the leadership of management and teachers) as explained in Chapter 1.

**Column:** Whole school approach

The whole school approach is thought to be the most effective health promotion method in which children, teachers and other staff of the school, guardians, and community members collaborate at the school in order to change the present situation of the school and improve the health and well-being of all the people. The whole school approach is characterized by, first of all, its perception that a school is the aggregate of many systems that depend on each other. The second characteristic is, therefore, efforts by all related people, who collaboratively participate in the process for changing the school to improve the health and well-being of all the people related to the school who change the system of the school as a whole by capitalizing on the resources and strengths of everyone.




This figure is created based on data obtained from The World Bank. Suicide Mortality Rate, Cambodia.
Male:https://data.worldbank.org/indicator/SH.STA.SUIC.MA.P5?end=2019&locations=KH&start=2000&view=chart
Female:https://data.worldbank.org/indicator/SH.STA.SUIC.FE.P5?end=2019&locations=KH&start=2000&view=chart

**Figure 12.3** Mortality rate caused of suicide (per 100,000) in Cambodia

**Column:** Loss and grief, and grief care

There are various events in life that may include suicide, disasters and accidents, diseases, and unemployment, and we may be overwhelmed by sorrow when we lose loved ones, such as family members or someone close to us, or things that are important to us; or when we become ill or disabled and lose our health. The psychological (e.g., denial, depression, anger, sorrow, anxiety, and helplessness), physical (e.g., fatigue, sleep disorder, anorexia, and autonomic imbalance), and social (e.g., withdrawal, isolation, and increased alcohol drinking) reactions we experience when we lose loved ones are called **grief reactions.** These are normal reactions to loss; if we suppress sad feelings, we will suffer from psychological difficulties for a prolonged period, making such difficulties even harder to overcome. Grief is a long process, from the occurrence of an event to healing, and this process is called **grief work**. In the **grief care** part of this grief process, the most important thing is to respect and sympathetically listen to, as a person, the story of the person who is suffering from total (i.e., psychological, physical, social, and spiritual) pain. We must refrain from easily encouraging, persuading, or curing such a person.

### 6) Addiction and dependence

People can be dependent on various things besides alcohol. **Dependence** can broadly be divided into dependence on chemical substances (e.g., alcohol, cigarettes/nicotine, caffeine, amphetamine, narcotics, stimulants, and cannabis), which is **substance dependence**, and dependence on behaviors (e.g., eating disorder/overeating, gambles, games, internet, sex, and shopping/waste), which is **behavioral addiction**. Dependence is caused by changes in the functions of the brain, mind, and body due to the habitual use of a chemical substance, including alcohol and cigarettes, or a repetition of a behavior, such as gambling or games. Taking alcohol or engaging in a gambling activity gives the experience of enjoyment and a good feeling and stimulates a circuit in the brain called the reward system that transmits pleasure. The brain releases a neurotransmitter called dopamine that enhances this pleasure, creating a strong desire to experience this pleasure again. The desire to repeatedly experience this pleasure is satisfied, and when the drug use behavior is repeated, **resistance** develops because the same stimulus will no longer have the same effect as what was previously obtained from the drug or behavior. In this way, repeating drug ingestion or gambling change the functions of the brain, mind, and body, resulting in dependence. Therefore, in dependence, a condition in which the functions of the brain and body have been changed, the behavior cannot be stopped by one's own will.

There is **psychological dependence** and **physical dependence**. The former is, for example, the behavior of searching for a cigarette to get it when the person feels tempted to smoke, and the latter is, in the case of tobacco dependence, a condition in which **withdrawal symptoms**, such as irritation and hand tremors, occur when the nicotine concentration in the body decreases. In the case of alcohol dependence, autonomic nerve hyperactivity (e.g., sweating, hand tremors, elevation of blood pressure, and tachycardia) and psychological symptoms (e.g., hallucination, irritation, anxiety, and excitation) can appear. Note that not all chemical substances that cause substance dependence necessarily result in physical dependence.

For information, the number of abusers of major drugs (amphetamine/methamphetamine [stimulants], cannabis, heroin, and narcotics) in Cambodia is estimated to exceed 2% of the population (for the 1998–2004 period), which makes the country one with the highest drug abuser rates in the Asia-Pacific region, which includes Hongkong, the Philippines, Thailand, Indonesia, Laos, and Malaysia.[26]

Those who develop dependence need to receive medical care to treat their physical symptoms instead of trying to cure them on their own. A self-help group, which supports mental health, is effective at changing behaviors of dependence and addiction. Therefore, Cambodia is expected to set up self-help groups on various addictions.

## 4. Common mental diseases (schizophrenia and epilepsy)

### 1) Schizophrenia

Schizophrenia is one of the most common chronic mental diseases, affecting 7 to 10 people per 1000 population irrespective of differences in backgrounds such as society, culture, and ethnicity, and which can develop severe chronic psychological symptoms. The WHO estimates that 20 million people are affected by schizophrenia around the world.[38] Since no epidemiological study of schizophrenia has been conducted in Cambodia, the approximate number of patients, including those untreated and treated, is unknown. It has been reported that due to insufficient social understanding of the disease and psychiatric care, it takes 47 months for patients to start treatment.[39]

Disorders resulting from schizophrenia appear in thinking, recognition, emotions, language, self-consciousness, and behaviors, and typical symptoms include delusion (e.g., being monitored by neighbours), hallucination (e.g., hearing someone talking when no one is there), disorders of consistency in conversation and behavior, lack of emotion or motivation, disorder of ego (one's idea is known to others), and loss of insight into disease. Therefore, in addition to the suffering of the patient, the family members taking care of the patient bear a heavy burden and are likely to be discriminated against by people around them. The disease tends to manifest in a person's late teens to thirties, and although the exact cause is unknown, a study of twins reported that the probability of a pair of twins developing schizophrenia is 50%, suggesting that it may be related to heredity, the rearing environment, and shared experience of stressful events.

The WHO points out that schizophrenia can be treated or cured, but for that, drug therapy, rehabilitation (e.g., life skills training, social skills training), and acceptance by the community are important.

### 2) Epilepsy

Like schizophrenia, epilepsy is a general mental disease, and according to the WHO,[40] approximately 50 million people are suffering from the disease around the world, with 80% living in low-middle income

countries without receiving treatment. The prevalence of epilepsy in Cambodia is estimated at 5.8 persons per 1000 population and reported to be lower than that in neighbouring countries such as Laos (7.7/1000 persons), Vietnam (10.7/1000 persons), and Thailand (7.2/1000 persons).[41]

Epilepsy is a disease characterized by recurrent “epileptic seizures” that cause a person to become unconscious and unresponsive suddenly. Symptoms are transient and subside if “epileptic seizures” disappear. However, a person may be injured depending on the place where the person collapses after losing consciousness due to a seizure, so that it is important to reduce the frequency of seizures.

The disease is said to occur at any age but is particularly frequent in children and elderly people. The causes of epilepsy can be identified in some cases, which include a brain tumour and a posttraumatic cerebral symptom, but they are unclear in other cases. Because about 70% of the afflicted can lead a normal social life by receiving a proper diagnosis and taking antiepileptics, there is no need to excessively restrict school attendance and work. Despite this fact, many people suffering from epilepsy are subject to stigma and discrimination.

## 5. Mental health care

### 1) Help-seeking behavior

According to a survey of 391 high school students in Grades 10 and 11 in Phnom Penh and the Prey Veng province, which investigated **help-seeking behavior**, the person(s)/information source(s) from whom/which they most frequently seek help to cope with their personal and emotional problems were, as a whole, their mothers (74.4%) and friends (73.9%), followed by fathers (51.4%), other relatives or family members (38.9%), internet chat rooms (29.9%), teachers (28.9%), their boyfriends/girlfriends (19.2%), and information on the internet (18.7%). Mental health professionals, doctors, and telephone counselling were around 8 to 11%, indicating that these are not as accessible as informal information sources. Religious figures were also chosen by about 10% of the students as persons from whom they seek help.

This result shows that family members, students, and teachers are likely to be chosen as persons to whom they talk about their mental health problems, including anxiety and depression, and therefore, efforts for mental health education in communities and schools are important. In addition, since they use the internet to search for information about mental health and persons from whom they seek advice, creating an internet website that provides accurate information about mental health is also a goal. (See TPO Cambodia, https://tpocambodia.org/tips-for-good-mental-health/, etc.)

High school students’ help-seeking behaviors differ between the sexes and among regions. It is noteworthy that boys are more likely to use internet chat rooms and websites to seek information and help than girls are, and that high school students in rural areas seek advice from teachers more frequently than those in urban areas do. This suggests that teachers play a greater role in rural areas with poor mental health resources and thus are required to receive education/training on counselling.

### 2) Counselling, mental health services

Globally, mental health issues are increasing, as are needs for counselling and mental health services. However, systems are insufficient in low- and middle-income countries, and particularly Cambodia, where mental health services and psychiatrists suffered devastating damage during the Khmer Rouge era, lagging far behind in this field. Moreover, mental health receives a lower policy priority than public hygiene challenges such as infectious diseases and lifestyle diseases; the challenge is to give a higher policy priority in light of the present situation of mental health in Cambodia.[26]

Meanwhile, regarding the question of whether counselling is really effective in Cambodian society, it has been pointed out that building a healing relationship between an individual and a counsellor through “talking and listening” is effective in Cambodia as well. For counselling and mental health services to be in place, the challenges need to be addressed first, which includes the spread of education and knowledge on mental health, the human resource development of professionals (i.e., psychiatrists, nurses, clinical psychologists, and social workers) and subprofessionals (e.g., general practitioners, teachers, and community/health workers), as well as the improvement of the quality of training, and the improvement of the quality of mental health services as well as the elimination of the gap between urban and rural areas.[26]

Counselling basically requires active listening skills, the ability to reflect on one’s own thinking and emotions, and the power to accept human diversity. Listed below are the 11 points that teachers should keep in mind support children with a mind adequate to counselling. Nevertheless, teachers are not mental health professionals and should fully understand their limitations.

i) Do not try to elicit a solution or answer to the problem.
ii) Create a receptive and relaxed atmosphere, and accept the child’s feelings.
iii) Ask open questions. Do not interrogate.
iv) Wait for the child’s answer as long as possible, and endure silence.
v) Use the child’s words to convey the message that you “understand” them.
vi) Express a positive interest in the child.
vii) Show a natural, reasonable empathy.
viii) To clarify the feelings of the student, use or appropriately paraphrase the child’s words.
ix) To organize issues, summarize the story.
x) Look at the problem from the child’s perspective and seek meaning from that perspective.
xi) Believe in the child’s abilities to grow and solve problems.

**Exercises for further thought and research**

[12-1] What does it mean to have a healthy mind?

[12-2] Research the defense mechanism of the mind by referring to resources such as Britannica: Defense mechanism (https://www.britannica.com/topic/defense-mechanism). Discuss what kind of defense mechanism is commonly used in Cambodia. Research mature psychological defense mechanisms in particular.

[12-3] What is a mechanism by which the mind and the body are mutually affected?

[12-4] What influence does stress have on mental health?

[12-5] What are challenges in mental health in Cambodia? Discuss how they should be addressed.

[12-6] Give examples of internalized and externalized problem behaviors. Summarize what you think about how to respond if a child seeks advice on such mental health problems, and discuss this topic in a group.

[12-7] Discuss the reasons for and the backgrounds behind teachers' use of physical punishment in the education of children. How can you guide children without relying on physical punishment? Exchange ideas for alternatives.

[12-8] Consider the person you will seek for help first when facing a personal problem, and why you chose that person.

[12-9] Reflect on your experiences of being asked by your friends and family members about how they should address their problems, and review whether you practiced the points for supportive listening.

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