Chapter 13 Mental Health Problems and Mental Disorders among Adolescents



Vimala Veeraraghavan

Abstract The chapter discusses the mental health problems/mental disorders faced by adolescents in the Indian as well as global context. Factors related to mental health problems in adolescents are explained. The many trends in mental health problems, such as stress, suicidal tendencies, substance use and abuse, etc., in adolescents are discussed highlighting the symptomatology, diagnostic criteria, prevalence of the disorder, causes, and treatment measures. Further, emotional and behavioural disorders, risk-taking behaviours, eating disorders, anxiety disorder, and schizophrenia are also discussed.

Keywords Mental health problem · Mental disorder · Depression · Suicide and attempted suicide · Emotional and behaviour disorder · Childhood behaviour disorders · Oppositional defiant disorder · Conduct disorder · ADHD · Learning disability · High-risk behaviours · Eating disorders · Anxiety disorder · Body dysmorphic disorder and schizophrenia

Introduction

Harish, a 17 year old boy, was extremely concerned about his poor performance in school. He has been struggling with academics and was worried if he would be able to clear his 12th class Board examination. He was fidgety, restless, stressed and felt unmotivated and disinterested in studies. He was also anxious about his inability to control his negative thoughts and fear of failure in school. He was not listening to his parents and started arguing on the slightest of things.

Leena, a 13 year old girl, shifted school as her father got transferred to a new city. She was very shy child and found difficult to adjust in a new environment. She missed her friends in the old school. She started to stay alone and withdrawn. She also performed poorly in the class test. This further affected her self esteem and she felt her classmates and teachers see her as a poor student.

Former Professor & HOD Psychology, DU, Former Emeritus Professor, Psychology, IGNOU and Emeritus Professor Psychology & Education, Apeejay Stya University, Sohna, Gurgaon, Haryana, India

V. Veeraraghavan (⋈)

As it can be seen above, the two cases exemplify mental health problem. Harish is faced with examination stress, fear of failure, and anxiety. He was restless and not able to concentrate. These are some indicators that Harish is facing some mental health problems. Leena also faced problems of adjusting to the new school and it affected her school performance. It can be noted here that mental health problems can be manifested even in normal school going youngsters. In fact, any one at any stage of development may get affected by mental health problems. At the less severe level, it affects the adjustment and efficiency of the individual. Unless properly diagnosed and intervened at the earliest with suitable therapeutic methods, the mental health problems may become severe leading to mental illness or disorders, seriously impairing the cognitive, affective, and other aspects of the individual. In the examples given above, the problem in both the cases was relatively milder and with support from parents, teachers, and professional help from psychologists and counsellors, the problem can be taken care of.

Thus the mental health problems may vary from mild to moderate to severe levels. Further, mental disorders or mental illnesses can affect a person irrespective of age, gender, class, and race.

Defining Health and Mental Health

Health consists of both physical health as well as mental health. Both complement and supplement each other. As stated by the World Health Organization (WHO,), "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Though this definition has contributed a lot in creating awareness and understanding about different aspects of health including mental health, it has also been criticized that it excludes those who are living with disease/infirmity or disability and managing their life well. The absoluteness of the term 'complete' in the definition is criticized in relation to well-being (Machteld et al., 2011) as 'complete' is neither operational nor measurable (Jahad & O'Grady, 2008; Smith, 2008). The requirement for complete health "would leave most of us unhealthy most of the time" (Smith, 2008).

It is possible that individuals with disease or infirmity can manage and adapt to the situation/their health conditions and live well. By successfully adapting to an illness, people are able to work or to participate in social activities and feel healthy despite limitations (Machteld et al., 2011). Hence, definition of health needs to include the ability to adapt and self-manage.

This has an implication for the definition of mental health also. Mental health has been defined by WHO as a state of well-being in which an individual realizes his/her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his/her community. It is more than just the absence of mental disorders or disabilities. This indicates an attempt at ongoing and continuous emotional and mental well-being. Thus, good and positive mental health means that the individual is able to effectively use his or her mental functions such as thinking,

feeling, and reacting appropriately in his or her interactions with people and situations and live his or her life in a balanced manner. On the other hand, poor mental health renders a person relatively incapable of using his mental and cognitive functions appropriately. His thinking, feeling, and reacting become considerably decreased or non-functional.

Adolescence (10–19) years are a critical phase in the entire life span. Since they are the future of the nation, well-being of the adolescents needs to be promoted so that they can make use of their full potential. As reported by the WHO, around 20% of the world's children and adolescents have mental disorders or problems. This makes it all the more significant to protect the adolescents from adverse experiences and risk factors and build up the protective factors so as to ensure a sound mental health and increased productivity among the adolescents.

Key Facts regarding Mental Health of Adolescents (WHO, 2018).

- One in six people are aged 10–19 years.
- Mental health conditions account for 16% of the global burden of disease and injury in people aged 10–19 years.
- Half of all mental health conditions start by 14 years of age but most cases are undetected and untreated.
- Globally, depression is one of the leading causes of illness and disability among adolescents.
- Suicide is the third leading cause of death in 15–19-year-olds.
- The consequences of not addressing adolescent mental health conditions extend to adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives as adults.
- Mental health promotion and prevention are key to helping adolescents thrive.

Adolescents are passing through that stage of development where they experience physiological and psychological changes as well as changes in their cognitive abilities and social relationships including the relationship with peers. All these changes can lead to an identity crisis and create a certain degree of confusion, discomfort, and imbalance, that manifest in the adolescent's behaviours. The socio-cultural environment also plays an important role here. In the absence of appropriate care and support, some adolescents may develop severe problems leading to mental/ psychiatric disorders. A mental disorder is a distressing condition that affects adversely the individual's cognition, emotion regulation, and behaviours causing dysfunction in the psychological, biological, and developmental processes. These problems are of varied types affecting adversely the growth and development of adolescents that result in emotional disturbances impacting their academic performance, work life, and social life.

World Health Organization (WHO) defines mental disorder as behavioural or psychological and of clinical significance and is accompanied by a concomitant distress and/or a raised risk of death, or an important loss of freedom and involves unexpected cultural response to any situation (WHO, 2003).

Diagnostic and Statistical Manual (DSM 5) defines mental disorder as a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning (American Psychiatric Association, 2013).

International Classification of Diseases (ICD 10) states that "'mental disorder' is not an exact term, although it is generally used. It implies the existence of a clinically recognizable set of symptoms or behaviours associated in most cases with distress and with interference with personal functions" (ICD, 1992).

Mental illnesses are medical conditions that make it difficult for the individual to cope with the ordinary demands of life (CEC, 2018). As indicated by The National Alliance on Mental Illness (NAMI), "Mental illnesses cause disruption in a person's thinking, feeling, mood, ability to relate to others and daily functioning". Similar to physical illness, mental disorder also has interacting causes ranging from heredity, brain dysfunction, neurological factors to family pathology and socio-cultural factors. Thus mental disorders/illnesses need to be taken seriously and appropriate steps need to be taken for its treatment.

Increasing Trend in Mental Health Problems of Adolescents

Mental health problems and mental disorders are increasing among the adolescents the world over due to changing socio-cultural context and a host of other factors (Michaud & Fombonne, 2005). The rise has been driven by social change, including disruption of family structure, growing youth unemployment, and increasing educational and vocational pressures.

The prevalence of mental health disorders among 11–15 year olds in Great Britain is estimated to be 11%, with conduct problems being more common among boys, and depression and anxiety more common among girls (Mental Health Foundation, 2016). In the United States of America, based on eight studies and a sample of 3104 children, Bronsard et al. (2016) reported a prevalence rate for mental disorders among adolescents as 49%, that is almost one adolescent for every two persons has a mental disorder. The more commonly obtained mental disorders were disruptive disorder (27%), conduct disorder (2%), oppositional defiant disorder—ODD (12%), and ADHD (11%). The prevalence of anxiety and depression was reported to be 18% with PTSD showing the lowest prevalence of 4% (Manchia et al., 2016).

In India, studies (Anita et al., 2003; Srinath et al., 2005) reported a prevalence rate for depression, conduct disorder, social anxiety, and panic disorder to be 12–16.5% among adolescents. Discussing the trends in mental disorders among adolescents, Ahmad et al (2015) pointed out that the prevalence of mental health problems in children and adolescents (5–15 years of age) showed an increase from 13% in 1996 to 19.4% in 2006 and 20% in 2011.

The National Mental Health Survey (NMHS) of India, 2015–2016, conducted by the National Institute of Mental Health and Neurosciences (NIMHANS) Bengaluru reported that the overall prevalence of any mental morbidity among the adolescents (13–17 years) was 7.3% (Gururaj et al., 2016). The prevalence was similar for both the genders (males—7.5% and females—7.1%). Further, the prevalence of mental morbidity was higher in urban metro areas (13.5%), followed by rural (6.9%), and urban non-metro areas (4.3%). Anxiety and mood disorders were found to be the most frequently occurring mental disorders in adolescents.

In a study by Sagar et al (2017), the 12-month prevalence of common mental disorders was found to be 5.52% (anxiety disorders—3.41%, mood disorders—1.44%, and substance use disorders—1.18%). Males (49.3% of the sample) had a higher prevalence of substance use disorders, and lower prevalence of anxiety and mood disorders as compared to the females.

The survey revealed a huge treatment gap of 95%, with only 5 out of 100 individuals with common mental disorders receiving any treatment over the past year.

Thus the increasing prevalence of mental health problems is a matter of great concern, especially among the young generation who are the economic force and future of the nation. Young persons are more prone to a number of health impacting conditions leading to mental health problems, due to personal choices, environmental influences, and life style changes including communicable and non-communicable diseases and injuries (Singh and Gururaj (2014). In their study on health behaviours and problems among young people in India, Singh and Gururaj (2014) point out that the youngsters engage in substance abuse and are often victims of road accidents, injuries and victims of HIV, STD, etc. All these may create a susceptibility to mental health problems in the young generation and add to the mental health burden of the nation.

As mentioned in the UN report, many of the health-related problems including mental health, are compounded by economic hardship, unemployment, sanctions, restrictions, poverty, etc. (United Nations, 2004).

The following section examines various factors related to mental health problems in adolescents.

Factors Related to Mental Health Problems in Adolescents

Mental health problems arise out of a dynamic interaction among the biopsychosocial factors. In most cases, it is a combination of biological, psychological, and socio-cultural factors that affect the mental health of adolescents and lead to mental health problems and mental disorders. The following factors are highlighted as related to mental health problems in the adolescents:

- Characteristics of the adolescents
- Disadvantaged background
- Socio cultural context
- Technology and media influence
- Chronic illnesses and disabilities.

The stage of adolescence is marked by huge physical as well as psychological changes. Failure of the adolescent to deal with this transition phase from childhood to adulthood successfully results in an identity crisis which may lead to mental health problems. Further, the stage of adolescence is characterized by a desire for autonomy, peer pressure, risk-taking behaviour, and increasing sexuality. All these affect their own development as well as their relationship with peer group, family, and the society.

The disadvantaged background, e.g., poverty, minority ethnic or sexual background, orphans, etc., may increase the risk of mental health-related problems. Abusive parents, harsh parenting, dysfunctional family, sexual abuse, violence are risk factors for developing mental health problems in the adolescents. Teenage pregnancy and early marriages may also affect their mental health.

Given the impact of technology in the lives of human beings today, adolescents are no exception. In fact, today's generation of adolescents use technology as their means of information, relationship, and entertainment. This impacts their adjustment and development negatively. Increased use of technology has a detrimental effect on mental health, leading to, for example, Internet addiction and suicide.

Adolescents suffering from chronic illnesses and disabilities are at greater risk of stigma, discrimination, and exclusion which affects their mental health. They lack support in terms of infrastructure as well as support from family and community that results in their isolation from the main stream.

Besides the above factors, we will highlight a few other important factors as observed in the recent trends in the mental health problems faced by adolescents. These are (i) Under nutrition and micronutrient deficiencies (ii) Stress (iii) Suicides

and attempted suicides (iv) Overweight and obesity and (v) High-risk behaviours shown to be associated with the development of certain mental disorders. These trending factors are discussed below.

(i) Under nutrition and micronutrient

Mental health problems of adolescents are related to the trend of undernutrition and micronutrient deficiencies, due to fast food or junk food consumption or similar eating habits. For instance, according to National Institute of Nutrition (2002, 2006), more than half the population between the ages of 10–18 years are undernourished. Similar findings were also reported by other researchers (Wasnik, et al., 2012).

In a school-based study, Haboubi and Shaikh (2009) studied the stunted growth in boys and girls, and reported that nearly 40% of adolescent boys and girls were stunted due to malnutrition. On the other hand, a community-based study among Madhya Pradesh tribals, relating malnutrition to stuntedness showed 51.7% of adolescents being stunted (Rao et al., 2003). Though stuntedness is a physical problem, it also affects the mental health of the individual who feels anxious and depressed due to his or her being very different from the normal adolescent individuals.

(ii) Stress

Another trending factor related to adolescent mental health problem is stress. While it is natural to expect certain increased levels of stress in adolescents due to physical and psychological changes, it has been observed that quite a few adolescents suffer from stress which by itself is a mental health problem and which also underlie some of the mental disorders. In a study by Sahoo and Khess (2010), 20% of the young adults reported that they experienced stress. Sharma and Sidhu (2011) studied adolescent girls in regard to their experiencing stress, and reported that 60% of the girls in the study expressed financial stress, whereas 85–90% reported moderate level of social stress, with 90.6% of the entire sample of adolescents expressed academic stress. Such stress over a period of time ends up in the development of mental disorders such as anxiety disorder, depressive disorder, etc.

(iii) Suicides and attempted suicides

Suicide and attempted suicide presents another trend in mental health problems among adolescents. Wasserman et al. (2005) examined global suicide rates among adolescents in the 15–19 age group using the World Health Organization (WHO) Mortality Database covering 90 countries. Findings showed that the mean suicide rate for this age group was 7.4/100,000, with suicide rates being higher in males (10.5) than in females (4.1). Further the analysis also showed that suicide was the fourth leading cause of death among young males and the third for young females. The researchers reported that of the 132,423 deaths of young people, suicide accounted for 9.1%. They also reported a rising trend in suicide rates between 1965 and 1999, covering 26 countries for whom the data were available.

In India, about 40 per cent of suicides are committed by persons below the age of 30 years (Vijayakumar, 2006). In a sample of 5115 attempted suicide, it was found that 2.1, 8.4, and 28.6% of individuals were in the age group 10–15, 16–20, and 21–25 years, respectively (Gururaj et. al., 2008). The study also showed that among the 912 completed suicides, 2.2, 16.2, and 21.6% were in the age group 10–15, 16–20, and 21–25 years, respectively.

The National Crime Records Bureau of the Ministry of Home Affairs, New Delhi, India (NCRB, 2012) indicates that age specific suicide rate among 15–29-year-old persons is on the rise, increasing from 3.73 to 3.96 per 100,000 population per year from 2002 to 2011.

Thus it may be stated that the trend of suicides and attempted suicides among adolescents and young adult have been reported to be on the increase, which is quite serious. Considerable efforts are needed by government and other agencies to reduce this rate of incidence and prevalence of mental health problems in youngsters.

(iv) Overweight and obesity

Another trend in the mental health of adolescents in the present day is one of overweight and obesity which render them anxious, worried as well as depressed.

In a research to review prevalence of overweight and obesity in adolescents, Bibiloni et al. (2013) took a total of 40 studies of which 25 were nationally representative of 10 countries. They concluded that the prevalence of overweight and obesity among adolescents worldwide is high, and obesity was higher among boys. The IOTF (International Obesity Task Force) criterion is the most frequently used method to classify adolescents as overweighed or obese in public health research. Binge eating, anorexia nervosa, which we will discuss in the subsequent sections, are some of the problems related to overweight, obesity, and adolescent's mental health. Research in this area has shown a prevalence of overweight among children aged 10–19 years to be 9.9–19.9% (Aggarwal et al., 2008; Deshmukh et al., 2006; Goyal et al., 2011; Khadilkar & Khadilkar, 2004; Kotian et al., 2010).

(v) High-risk behaviours

A major trend in mental health problems of adolescents is the high-risk behaviours. The onset of multiple risk behaviours, such as smoking, anti-social behaviour, hazardous alcohol consumption, substance abuse, unprotected sexual intercourse, etc., are associated with increased risk to develop various illnesses including mental disorders, morbidity, and premature mortality (Kipping et al., 2012).

The Center for Disease Control and Prevention's (CDC) Division of Adolescent and School Health (DASH), USA, routinely monitors youth health behaviours and experiences, so as to implement primary prevention of HIV, sexually transmitted diseases and teen pregnancy. The weekly report of the CDC's Morbidity and Mortality surveillance on the 2017 National Youth Risk behaviour survey (YRBS) provides data on health behaviours and experiences of high school students across the country

(CDC, 2018). According to its 2007–2017 report, the high-risk behaviours among youngsters in the year 2017, showed among various aspects, increase in the use of illicit drugs, injecting drugs, injury with a weapon, significant increase in students attempting suicide, etc., in 2017 as compared to 2007.

As for high-risk behaviour in adolescents in India, the National Family Health Survey-3 (NFHS) (2005–06) indicated that only 14.1% of unmarried sexually active adolescents used safe sex measures (IIPS, 2012). Kumar et al (2011) in their study of 2475 'never married' boys and girls, pointed out that in premarital sex, condom use by males was only 22.3% and by females still lower with 6.3%.

From the available data, Singh and Gururaj (2014), Gururaj et al. (2016) concluded that while prevalence of mental morbidity was 7.3%, prevalence of high-risk sexual behaviour among youngsters in India was high and varied across the different studies needing priority focus so as to prevent HIV and related diseases in them. Malhotra and Patra (2014) reported higher prevalence rate (23.33%) of mental disorders among adolescents in India. In regard to substance abuse, the National Household Survey (2002) by UNODC showed that approximately 43% of adolescents in India indulge in substance abuse (Saranghi et al., 2008) and according to Juyal et al (2006), 31.3% use one or more substances regularly.

It may thus be stated that the trend of mental health problems and mental disorders in adolescents varies considerably from study to study. Many trends, such as stress, suicidal tendencies, high-risk behaviours, etc., have been identified, studied and the prevalence rates have been reported. Mental health problems among adolescents appear to be increasing over the years and the severity of the problems requires immediate and urgent attention and measures have to be put in place to help adolescents overcome many of their mental health problems and become active and contributing members of the society.

Common Mental Health Problems/Disorders in Adolescents

It is reported by WHO (2014) that about 50% of mental disorders which develop during adolescent years remain undetected and untreated until adulthood or later years. It states that mental disorders and substance use disorders are major contributors to health-related disability in children and youth. Behavioural disorders have been found to be the sixth leading cause of disease burden among adolescents and affect their education and may at times lead to indulge in behaviours that are in conflict with the law (Erskine et al., 2015).

In addition to mental disorders which are severe in nature, reflecting psychiatric disturbance, adolescents are more commonly affected by mental health-related problems and issues. These can have a negative impact on their development and adversely affect their quality of life emotionally, socially, and vocationally.

Some of the common mental disorders suffered by adolescents include (i) Depression (ii) Suicide and self-injurious behaviours, (iii) Emotional and behavioural disorders (iv) Childhood behaviour disorder (v) Oppositional Defiant Disorder (ODD),

(vi) Conduct Disorder (CD), (vii) Deviant behaviours, (viii) Attention Deficit and Hyperactivity Disorder (ADHD), (ix) Learning Disability (LD), (x) Risk-Taking Behaviours, (xi) Substance Use Disorder, (xii) Eating Disorders (xiii) Anxiety Disorder (xiv) Body Dysmorphic Disorder (BDD), and (xv) Schizophrenia.

(i) Depression

Depression in adolescence is also referred to as 'teenage depression'. It is one of the most common global mental health problems, and in adolescents, it is one of the under-recognized problem that needs psychiatric help. The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (APA, 2013), states that to be diagnosed as depression, following symptoms should be present: depressed mood, psychomotor agitation or retardation, diminished interest or pleasure, insomnia, fatigue or loss of energy, diminished ability to concentrate, significant weight loss, feelings of worthlessness or excessive guilt, and recurrent thoughts of death. Individuals exhibiting five or more of the above-mentioned symptoms meet the criteria for depressive disorders (APA, 2013).

According to WHO (2018), depression is one of the leading causes of illness and disability among adolescents, and suicide is the second leading cause of death in adolescents. Violence, poverty, humiliation, and low self-esteem can increase the risk of developing mental health problems. It is stated that globally, depression is the ninth and anxiety is the eighth leading cause of illnesses and disabilities in adolescents.

An estimated 9% of the U.S. population of adolescents aged 12–17 had reported one major depressive episode with severe impairment (NIMH, 2017). Prevalence of depression among adolescents in India varies between 10 and 60% (Jha et al., 2017; Nagendra et al., 2012). Major depression affects 3–5% of children and adolescents (Bhatia & Bhatia, 2007) negatively impacting their growth and development, school performance, peer or family relationships, and in certain cases may also lead to suicide.

Adolescent depression is often mistaken for boredom, irritation, and disinterest in school, which in reality is not so. Some of the features of adolescent depression that is based on a research study by Bahls (2002) include (i) irritability and instability, (ii) depressed humour, (iii) loss of energy and lack of concentration, (iv) lack of motivation and interest with psychomotor retardation, (v) feelings of guilt and hopelessness with low self-esteem, (vi) poor school performance, (vii) sleep disorders, withdrawal from friends and feelings of isolation, and (viii) suicidal ideas and behavioural changes. Other studies (Gururaj, 2013) showed that depression was associated with guilty feeling, pessimism, sadness, and past failures, inability to cope with academics at the school, problematic relationships and economic difficulty. He pointed out that youth with depression are at high risk for developing mental disorders such as anti-social behaviour and substance use disorders. Medication, psychotherapy, and cognitive behaviour therapy are some of the interventions that can help in depression.

(ii) Suicide and Attempted Suicides

Encyclopedia of Children's Health (2018) states that suicide is the act of ending one's own life. Suicidal behaviour is thoughts or tendencies that put a person at risk for committing suicide. It is the third leading cause of death among 15–19 year olds in the United States and the sixth leading cause of death among 10–14 year olds. Nearly 90% of the world's adolescents live in low- or middle-income countries but more than 90% of adolescent suicides are among adolescents living in those countries (WHO, 2018). Adolescent years are stormy and many major decisions regarding their future have to be taken as they continue to develop their newer identities. Faced with many challenges, they experience considerable stress which is one of the reasons for their contemplating or even committing suicide.

Data of suicides among persons of age group 14–30 years in India by the NCRB (2016), clearly indicates that the number of persons in the age group of 18–30 years, who indulged in suicidal behaviour, was 51,787. Within this, nearly 85% were between 18 and 30 years and the remaining were between 14 and 18 years of age. As of 2017 data, India's total population is 133.92 crores and the persons below 30 years constitute 25.578 crores. Within this, the percentage of young persons indulging in suicidal behaviour is 53,255. Risk factors for suicide are multifaceted, including harmful use of alcohol, abuse in childhood, stigma against help-seeking, barriers to accessing care, and access to means. In a study by Im et al (2017), it was pointed out that the risk factors in adolescent suicide ideation include gender, academic performance, socio-economic status, and living with single parent. Communication through digital media about suicidal behaviour is an emerging concern for this age group (WHO, 2018).

As for the treatment of suicide attempters and those who contemplate suicide or have suicidal ideation, psychological counselling combined with cognitive behaviour therapy helps to remove suicidal ideas from their minds. Also family counselling and guidance to parents and close family members help in developing more.

Providing psychological counselling, guidance and supportive relationships between adolescents and family members is crucial in the prevention of suicide risk in adolescents. The Safety plan intervention (SPI) appears to be an effective brief intervention (Stanley & Brown, 2012). This includes evidence-based suicide risk reduction strategies such as lethal means reduction, brief problem-solving and coping skills, increasing social support and identifying emergency contacts to use during a suicide crisis, etc. Another preventive measure is the Crisis response planning (Bryan, 2010), which is a brief intervention in which individuals use a small card to write out steps for self-identifying personal warning signs, coping strategies, enlisting social support, and accessing professional services. Within a sample of high-risk active duty soldiers, crisis response planning was found more effective than contracts for safety in preventing attempts, reducing suicide ideation and hospitalization (Bryan et al., 2017).

(iii) Emotional and Behavioural Disorders (EBD)

Emotional disorders are characterized by increased levels of anxiety, depression, fear and somatic symptoms. Behavioural disorders, on the other hand, are an umbrella term that includes specific disorders such as Attention Deficit Hyperactivity Disorder (ADHD) and Conduct disorders, commonly seen in adolescents. Further, developmental disorders is also an umbrella term covering intellectual as well as autism spectrum disorders.

IDEA (Individuals with Disabilities Education Act, 2004) of the U.S. Department of Education defines emotional disorder or disturbance (ED) as a condition exhibiting one or more of certain characteristics, for example, (i) inability to learn that cannot be explained by intellectual or health factors; (ii) inability to build and maintain satisfactory relationships with peers, teachers and others; (iii) inappropriate behaviours under normal circumstances; (iv) a general pervasive mood of happiness or depression and (v) a tendency to manifest physical symptoms associated with personal or school problem. These disorders affect the adolescent's social, psychological, and physical skills (NICHCY, 2010).

As put by CEC (2018), children having an emotional disturbance show the following characteristics: (i) hyperactivity (short attention span, impulsiveness); (ii) aggression or self-injurious behaviour (acting out, fighting); (iii) withdrawal (not interacting socially with others (excessive fear or anxiety); (iv) immaturity (inappropriate crying, temper tantrums, poor coping skills); and (v) learning difficulties (academically performing below grade level). Those having serious emotional disturbances may exhibit distorted thinking, excessive anxiety, bizarre motor acts, and abnormal mood swings.

It needs to be noted here that even though many children may show some of the above symptoms, they may not have emotional and behavioural problems. The frequency, intensity, and duration of the symptoms along with the extent of their impact on the day-to-day functioning of the individual need to be considered while diagnosing as emotional and behavioural problems.

Prevalence of behavioural and emotional problems in adolescents across the world varies from 16.5 to 40.8% (WHO, 2001). In India, it varied from 6.3 to 12.5% (Srinath et al., 2005).

The causes for this disorder include lack of appropriate instruction in reading, writing, and mathematics as well as visual, hearing, and motor disability in the child, and certain cultural factors, environmental and economic disadvantage, and atypical education history. Also, chemical imbalances in the brain and body affect managing emotions. The biological factors include prenatal exposure to drugs or alcohol, a physical illness or disability, an undernourished lifestyle, brain damage and hereditary factors (NSODC, 2005, 2008).

An adolescent with emotional and behavioural disorder (EBD) whose problems increase in frequency and intensity to such an extent that it affects their daily routine and school life adversely, requires special educational services for recovery. Treatment requires early intervention targeting the social—emotional development of the youngster, the stress factor that they go through, and the relationships based treatment involving their care givers (NSCDC, 2017). The relationship-based mental health interventions help to improve parent—child relationships leading the adolescent to diminish the risk for future mental health problems in adolescents (Zeanah et al., 2005).

(iv) Childhood Behavioural Disorders

Childhood behaviour disorders refer to repeated, severe and age-inappropriate behaviours such as destructive and challenging behaviours, aggression and violence, etc. It goes beyond the flouting of rules, crossing the limits imposed and breaking the boundaries built by parents and society which are typical characteristics of adolescence stage. According to Merikangas et al. (2009), childhood behavioural disorders are the sixth leading cause of disease burden among adolescents. These disorders can affect their academic performance and related areas, work life and at times may bring them in conflict with the law enforcement agencies due to violence or anti-social behaviours.

The causes underlying these disorders include biological factors consisting of physical illness or disability, malnutrition, brain damage, and hereditary factors. In addition, parental pressure, unhealthy, and inconsistent discipline, their poor attitude towards education and schooling as well as divorce between parents may all cause behaviour disorders in adolescents. Remedial measures include family counselling, behavioural, and multisystemic interventions.

(v) Oppositional Defiant Disorder

It is common to find adolescents to disobey, protest, defy rules, and show hostility towards parents, teachers, and authority figures. However, when they continue to show defiant behaviours with a degree of persistent stubbornness, showing an unwillingness to compromise or negotiate with others including their peers, it is a matter of serious concern.

Oppositional defiant disorder (ODD) is characterized by negative, defiant, disobedient, and often hostile behaviours most often directed at adults and people in authority. These children blame others for their misbehaviours and mistakes. In addition, they are argumentative, disobedient, resentful, and extremely sensitive. The prevalence of this disorder has been reported to be between 1 and 16% of children in the United States. As for India, there is a lacuna of studies on Oppositional Defiant Disorder (ODD). Mishra et al (2014) in their cross-sectional study of 900 school aged children of 6–11 years found the presence of ODD and CD in 7.73% of them.

The causes include the influence of similar behaviours in the family, parents, and other significant members, who reinforce the hostile behaviour in children as an acceptable means of interacting with others. There is no specific treatment but the role of parents in therapy is highly important, who are helped to reinforce the prosocial behaviours consistently, praise them, and reinforce the same (Mishra et al., 2014).

(vi) Conduct Disorder

Continuation of the aggressive and undesirable behaviours of adolescent may lead to conduct disorder under the following conditions such as (a) it is of long duration, (b) violates the rights of others, (c) goes against accepted norms of behaviour and, (d) disrupts the child's or family's everyday life. Conduct Disorder (CD) is a frequently occurring serious behavioural and emotional disorder that has its onset in adolescence. It is characterized by a persistent pattern of aggressive and non-aggressive rule breaking anti-social behaviours, which brings the youngster in conflict with the law and norms of the society.

In DSM-5, there is an introduction of a specifier of CD with a callousunemotional (CU) presentation which is a new type added to conduct disorder. Thus they lack empathy in their relationships. Symptoms of CD are of four categories, viz.,

- Aggressive behaviour: includes threats to cause physical harm, fighting, bullying, showing cruelty to animals and helpless people.
- Destructive behaviour: they are intentionally destructive, damages others' property and indulge in vandalizing public places, etc.
- Deceitful behaviour: they repeatedly tell lies, shoplift, break into people's homes or steal cars.
- Violation of rules: constantly violate rules of the society, play truant from home and school, play pranks on others which are injurious and harmful.

These youngsters are also sexually active at a very young age. Youngsters with conduct disorder cannot appreciate or visualize the hurt or harm they have caused to others. They never feel guilty or remorseful of their action. Conduct disorder is differentiated from oppositional defiant disorder in that ODD is mainly about being defiant to the authority figures, especially the parents and teachers. It is refusing to obey rules and being disciplined. They resist being controlled. Whereas conduct disorder, which occurs in a little older children and adolescents, goes beyond and not only resists being controlled but also tries to control others. They exhibit aggression, deliberate destruction, cruelty and lack of empathy, exemplifying a callous-unemotional interpersonal style as specified in DSM 5. Prevalence of ODD has been found to be around 7–8%, whereas it is around 5–12% for CD (Cholakottil et al., 2017; Mishra et al., 2014, 2015).

No exact cause is available for conduct disorders, however the biological, genetic, environmental, psychological, and social factors together appear to cause this disorder. Treatment involves medication and psychotherapy. In addition, providing the youngster with a nurturing, supportive, and consistent home environment can ensure a balance of love and discipline, which in turn may not only minimize the disorder but may also prevent it from occurring in the future (WebMD, 2018).

(vii) **Deviant Behaviours**

Deviant behaviours refer to those behaviours that are not in conformity with the norms of the society. These behaviours cause harm and injury to people, public property and damage to the existing system and bring the individual in conflict with the law. Deviant behaviour is different from aberrant behaviour in the sense that the aberrant behaviour would include traits like strangeness, eccentricity, and individuality, which are not harmful (Goode, 2016). On the other hand, deviant behaviour is any behaviour that is contrary to the dominant norms of society. While formal deviance refers to criminal violation of formally enacted laws, informal deviance refers to violations of informal social norms, which have not been codified into law.

One of the important signs of deviant behaviour in adolescence is social isolation and identification of self as 'deviant' by them. Some of the deviant behaviours indulged in by adolescents are playing truant from home and school, stealing, lying, cheating, and in more serious cases, assaulting, rape and murder. It is also known that adolescents are highly influenced by their peers either positively or negatively, and may indulge in deviant acts for the sake of conformity.

Analysing deviant behaviours in school setting, Nabiswa et al (2016) reported twelve types of deviant behaviours in varying scale of severity with a prevalence ranging between 3 and 21%. It is also reported that in case of sexually deviant behaviour, a victimized youth indulges and repeats deviant sexual behaviour (Burton, 2008).

Many theories explain the causes for deviant behaviour in adolescents, such as those of social control theory, social learning theory, differential association theory, etc., in addition to poor parenting, peer and school influence. Nkhata and Mwale (2016) pointed out that parenting techniques, peer group influence and school environment contributed to adolescent deviant behaviours. Further, they advocated that through counselling and by changing the school discipline and environment, the deviant behaviours could be reduced considerably. Treatment should focus on correcting deviant behaviours both by parents and professional psychologists, individually and in group. Counselling would help these youngsters to gain a better understanding of the root cause of their own anger and their need for power, control, and revenge. It also helps them to consider more appropriate replacement behaviours.

(viii) Attention Deficit/Hyperactivity Disorder (ADHD)

Attention deficit/hyperactivity disorder is a neurobehavioral disorder characterized by a combination of inattentiveness, distractibility, hyperactivity, and impulsive behaviour. According to DSM 5 (2013), ADHD is characterized as "a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals of comparable levels of development". The symptoms of ADHD include Inattention, Impulsivity and Hyperactivity. While causes for ADHD are not known, heredity, chemical imbalance and brain changes are stated to be some of the causes.

ADHD is prevalent worldwide and is also one of the emerging disorders in India. It interferes with school performance, self-esteem, family relationships, and predisposes teenagers to high-risk behaviours. According to Medicine Net (2018), current studies indicate that approximately 60–80% of patients diagnosed as children will meet diagnostic criteria during adolescence and adulthood. ADHD affects an estimated 3-5% of preschool and school-age children in the United States (Low, 2017). The majority of these children will continue to experience symptoms into adolescence and adulthood. In India the prevalence rate of 1.3% was reported in a study on 3120 children aged between 5 and 12 years from 18 schools (Ramya et. al., 2017). Adolescents with ADHD will commonly have problems with relationships (parents and peers), academic and nonacademic (for example, sports and employment) success, and self-esteem. As for treatment of ADHD, patient education is a vital part of treatment of ADHD. Cognitive behavioural therapy, insight oriented psychotherapy, and family counselling has been found to be useful along with medications.

(ix) Learning disabilities

Learning disabilities (LD) is most commonly observed among children and adolescents and also most misunderstood and under diagnosed. It is usually observed as difficulties in learning and using academic skills, specifically with regard to reading, writing, and arithmetic. DSM 5 uses the umbrella term of Specific Learning Disorder to include these specific disabilities related to reading, written expression and mathematics. These are key academic skills which need to be learned by the children. However, in case of learning disabilities, the child experiences difficulty in word reading, spelling, reading comprehension, arithmetic, and mathematical reasoning. Performance of such children in these areas is well below average for age.

However, we need to be more careful about defining and understanding it as it goes by the principle of exclusion. That is, it should not be due to any sensory handicap/impairment, intellectual disabilities, other mental or neurological disorders, emotional problem, socio-cultural disadvantage/adverse conditions such as inadequate instruction, lack of proficiency in the language of instruction or any psychosocial adversity. Thus, learning disabilities refers to deficiency in the basic processes of learning.

IDEA (2004) defines learning disabilities as "A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to think, speak, read, write, spell, or to do mathematical calculations". It encompasses dyslexia, dysgraphia, and dyscalculia that refers to learning disability in reading, writing, and arithmetic, respectively. DSM 5 describes these subtypes under specific learning disorder as follows:

 Specific learning disorder with impairment in reading: includes possible deficits in word reading accuracy, fluency, and reading comprehension.

- Specific learning disorder with impairment in written expression: includes
 possible deficits in accuracy in spelling, grammar, punctuation, and clarity
 or organization of written expression.
- Specific learning disorder with impairment in mathematics includes possible deficits in number sense, memorization of arithmetic facts, accurate calculation and math reasoning.

Discussing the risk and protective factors associated with emotional well-being in adolescents with learning disabilities, Syetaz et al (2001) conducted a national longitudinal study with the purpose of finding out the differences in emotional well-being among adolescents with and without learning disabilities. In a sample of 20,780 adolescents, of which 1301 were learning disabled, they found that adolescents with LD had twice the risk of emotional distress, risk of attempting suicide, risk of violence involvement as compared to their peers without learning disabilities.

In a review study focusing on published articles in peer-reviewed journals since 2000, Kuriyan and James (2018) found that 1–19% of school going children in India have learning disability as reported by various studies. On finding the mean score, they indicate that 10% of children in India have LD. While learning disabilities are caused by genetic and hereditary factors, early intervention improves outcomes for most children with disorders of learning, attention, and cognition (Pratt & Patel, 2007). Parental attitudes and commitment, availability of resources would make for significant positive change in these adolescents.

(x) Risk-Taking Behaviours

Adolescents indulge in risk-taking behaviours such as smoking, alcohol, drug abuse, unsafe sex, very risky adventure sports, reckless driving, binge drinking, etc. With increasing alcohol and drug intake, the probability of sexual risk-taking behaviours also increase, leading to HIV and other such diseases (WHO, 2018). Perpetration of violence is another risk-taking behaviour among adolescents. With the growing recognition of youth violence as a major public health problem, there is increased pressure to develop effective and early intervention programmes (US HHS, Surgeon General's Report, 2001).

In India, Das et al (2015) listed out risk-taking behaviour in Indian adolescents as dietary behaviour (indiscriminate and fast food), physical activity (sedantry life style and lack of physical exercises), mental health issues (indifferent attitude towards mental hygiene), protective factors (not taking precautionary or protective measures while indulging in sexual relationships), violence and unintentional injury, etc., being either in the 'moderate' or 'high' risk grade. The study by Agrawal and Agrawal (2013) showed that the prevalence of chewing, smoking and drinking among adolescents was 3.3%, 12%, and 0.9%, respectively. Adolescents, who were school dropouts, were found more likely to indulge in risk-taking behaviour than their counterparts. However, female adolescents, adolescents belonging to scheduled

tribe, other backward classes as well as those belonging to slightly higher socio-economic status, were observed to be less likely to indulge in any risk-taking behaviour. The authors recommended comprehensive prevention and control programmes for all adolescents and in particular to those adolescents who were school dropouts or had never been to school, as the latter were more likely to indulge in risk-taking behaviours.

As for causes that lead adolescents towards risk-taking behaviours, it may be stated that at the individual level, risk factors may include a history of involvement in crime, delinquency and aggressive behaviour, hyperactivity and conduct disorder in the person. At the family and relationship level, poor parental supervision, parental involvement in crime and harsh inconsistent discipline are risk factors for youth violence. At the community level, the risk factors are crime filled neighbourhood, gangs that supply guns and illicit drugs, unemployment, income inequality, and poverty. Keeping these causative factors in mind, a number of measures have been suggested to curb the youth violence (WHO, 2015), for example, youth violence prevention programme through policy guidelines, evidence-based youth violence prevention programmes, building skills and competencies of adolescents to choose nonviolent, safe behaviours, etc.

(xi) Substance Use Disorders

The curiosity of adolescents combined with peer influence lure them to indulge in smoking, drinking, and trying out more powerful drugs that may harm the body and mind. Starting with occasional use of the substance concerned, the youngster graduates to more powerful drugs, and become addicted to them. The adolescents use substances for a variety of reasons, viz., sharing a special experience, relieving stress, seeking new experience, and for overcoming the symptoms of mental disorders such as depression, anxiety, etc. In addition, other reasons for drug use include lack of self-control, peer pressure, lack of parental monitoring, parents themselves indulging in alcohol and drug, and taking prescription drugs indiscriminately over the counter, etc.

Adolescence is the key period of development for substance use disorders. Findings from the nationally representative samples of U.S. youth reveal that the lifetime prevalence of alcohol use disorders is approximately 8% and illicit drug use disorders is 2–3% (Merikangas et al., 2010; Swendsen et. al., 2012). An interesting trend in the prevalence rate is that there are more adolescents (of 13–18 years of age) who are indulging in the drug abuse as compared to the lower age group below13 years.

In the context of India, a study by Kailash (2016) found that at the age of 5 years, many children reported that they were consuming drugs. According to Saxena et al. (2010), around 5500 children in India start consuming tobacco products daily and some children as young as 10 years of age, consume tobacco. The most common substance consumed, according to Rao (2010), is nicotine, in the form of 'bidis' and 'gutkas'. Other substances used include adhesive glue, petrol, and gasoline. The reasons for the prevalence of drug

abuse in children and adolescents are economic burden, poverty, ignorance, migration, child labour, etc. (Qadri et al., 2013).

Regarding causation, the genetic and epidemiological studies have consistently demonstrated that genetic factors have a major influence on the progression of substance use to dependence (Merikangas & McClair, 2012). The environmental factors unique to the individual also play an important role in the youngsters using the substances in the initial stages when they get exposed to the substance.

One of the important risk factors for adolescent smoking is that their own parents, their friends, and peers as well as persons who are their role models, smoke (Sargent et al., 2004). For addiction to drugs or alcohol, it is important to admit the youngster to treatment and deaddiction programme followed by psychological therapy sessions such as cognitive behaviour therapy, psychotherapy, etc. More than the treatment, prevention of drug use and abuse is to be given the highest priority (Dalton et al., 2002). The role of society and media in portraying drinking or indulging in drugs as acceptable and fashionable also needs to be considered. Parental role is extremely important in conveying clear expectations to the youngster in regard to drinking, setting limits consistently, and monitoring their behaviours.

(xii) Eating Disorders

You may have seen teenagers and adolescents go on strict dieting to the extent of starving themselves to look thin. On the other hand, there are also instances of eating excessively and indiscriminately. These are called eating disorders characterized by abnormal or harmful eating behaviours where the adolescent has an extreme and unrealistic concern about body weight and shape.

The most common eating disorders are anorexia nervosa and bulimia nervosa where the person is excessively concerned about restricting the calorie intake. Anorexia nervosa is starving oneself, and feeling that one is still over weight despite dramatic/abnormal weight loss. They fear gaining weight and becoming fat despite having a very low body weight.

Bulimia nervosa is characterized by excessive eating or binge eating and then self-induced vomiting or purging, and the cycle goes on like this. They have a high level of distress, guilt and self-disgust during such binge eating. Another eating disorder, called binge eating disorder involves excessive eating and a high preoccupation with food but does not involve any purging. Apart from anorexia, bulimia nervosa and binge eating, there are a few more eating disorders such as pica, rumination disorder and avoidant/restrictive food intake disorder. While pica refers to eating of non-food items, such as soap, cloth, dirt, etc., rumination disorder refers to repeatedly and persistently regurgitating food after eating which may result in malnutrition if the food is spit out or if the person eats lesser in order to avoid regurgitation. In case of avoidant or restrictive food intake disorder, the person fails to meet the minimum required daily nutrition as he or she has lost interest in eating; or these persons may avoid foods with certain colours, smell or taste, or may

even be concerned with consequences of eating, e.g., the person may fear that the food would choke him. In these cases, food is not avoided because of the fear of weight gain. Such eating disorders are injurious to adolescent health and is accompanied by depression, anxiety and substance abuse.

It is important to understand the causative factors for eating disorders which are multifaceted and can be biological, sociological, emotional, and environmental. One of the focuses in research on eating disorders is the study of the biological component. Researchers have shown that brain pathways in persons suffering from eating disorder are very different from those who have no such disorders (Ekern, 2018). Another study by Hicks and et al., (2018) related eating disorders to different types of trauma experienced by the study participants. The purpose of the study was to show the prevalence of various trauma types in a clinical sample of adolescents presenting eating disorder in an outpatient clinic. They concluded that 35% of the sample reported experiencing one or more traumatic events such as bullying, death or loss of a dear person, sexual abuse, etc.

A variety of therapies by a multidisciplinary team of physicians, psychiatrists, psychologists, nutritionists, and other specialists will help the youngster to achieve goals that include normal eating behaviour, coping skills for stress management, personal confidence, understanding the root cause of the eating disorder, appropriate views of body image, improved relationship skills, treatment for co-occurring disorders, relapse prevention, and aftercare plans. Prevention includes minimizing the common social, familial, and individual factors like pressures to be thin, self-esteem problems, which can lead to eating disorders. Parents, school counsellors, and teachers should become educated about the causes that perpetuate eating disorders. Individual factors such as low self-esteem can also be addressed by appropriate and timely counselling.

(xiii) Anxiety Disorders

Adolescents commonly experience anxiety related to their physical growth, psychological and emotional development and also due to the academic pressure. These are normal anxious feelings, worries, and fears that are common to all children and adolescents. However, when anxiety is excessive, irrational, persistent, all pervasive, over whelming, and debilitating, it signals mental health problem. As mentioned by Connolly and Nanayakkara (2009), anxiety disorders are one of the most common psychiatric disorders observed in children and adolescents but yet go undetected and untreated even though it is highly treatable.

According to Cleveland Clinic (2018), anxiety disorders share a few common features, viz., (i) anxiety is often an inexplicable or irrational fear which interferes with the adolescent's ability to enjoy life or complete their daily routines, (ii) anxiety is puzzling to both adolescents and to their parents, and (iii) anxiety does not reduce even after logical explanation, and cause the adolescents significant distress and affects their efficiency, competency and

their level of functioning. Anxiety makes the adolescents nervous, has unrealistic fears, suffers sleep disturbance, bothered by obsessional thoughts, etc. Physical symptoms include tremors, sweating, muscular tension, stomach aches and headaches, which all make the adolescent feel that he or she has no control over them.

Anxiety disorders is an umbrella term that includes generalized anxiety disorder, social anxiety/social phobia, separation anxiety disorder, panic disorder, and specific phobias. Regarding causes, a combination of biological, psychological and social factors are considered to cause anxiety disorders.

Treatment of anxiety disorders involves pharmacological treatment. A more recent one is selective serotonin reuptake inhibitors (SSRIs) and selective serotonin–norepinephrine reuptake inhibitors (SSNRIs). These have been found to be effective in the treatment of anxiety disorders in adolescents. Also among the psychological therapies, cognitive-behavioural therapy (CBT) has been found to be efficacious in the treatment of these conditions in youth. In cases where the combination of CBT + an SSRI are administered, the improvement has been highly significant (Wehry et al., 2015).

Preventive measure will involve educating the adolescents and the parents, relaxation training, skills such as communication, problem-solving, and managing emotions.

(xiv) **Body Dysmorphic Disorder**

This disorder has its onset during adolescent period, with a point prevalence of 0.7–2.4% (Bjornsson et al., 2013). The youngster is obsessed with his or her appearance, and overly critical and distressed and anxious about some of the flaws perceived by them in their own physique.

Body dysmorphic disorder (BDD) affects their academic performance, relationships with peers, family members and teachers in the school. Bullying is also observed which takes the form of body shaming that ends in more negative body image and very low self-esteem in the adolescent person. This negatively affects the social interactions of adolescents. Weingarden and Renshaw (2015) reported that 94% of youths with BDD expressed experiencing social difficulties due to their appearance.

As for causes, abnormalities in the brain structure, genes and environmental factors lead to this disorder (Mayo Clinic, 2018). Treatment consists of **Selective Serotonin Reuptake Inhibitors (SSRIs) and cognitive behaviour therapy**.

(xv) Schizophrenia

Schizophrenia is a psychotic disorder that often begins in late adolescence or early adulthood, and has serious impact on an individual's thought, perceptions of reality, and behaviour. According to DSM 5 (American Psychiatric Association, 2013), diagnosis of schizophrenia is made if two or more of the following symptoms (delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behaviour, and negative symptoms such as diminished emotional expression), last for at least a month or longer period of time

and at least one of them impairs the functioning of the individual in work, interpersonal relations or self-care with some signs of the disorder lasting for a continuous period of atleast 6 months.

Psychosis means "withdrawal from reality", and that's exactly what schizophrenia is—a mental disorder that is mainly characterized by difficulty distinguishing what is real from what is not. The prevalence rate for schizophrenia in India according to NIMHANS study is 0.41–1.42. (NMHS, 2015–16). International prevalence rate of schizophrenia is reported to be 0.33–0.75 (Kustner et al., 2018).

Schizophrenia is said to be caused due to structural and functional abnormalities in those regions of the brain that control and coordinate thinking, perceptions and behaviours (Karlsgodt et al., 2010). Another explanation for schizophrenia onset is the brain pathways that use the chemicals dopamine and serotonin. Schizophrenia also occurs due to genetic factors in quite a few cases.

Regarding treatment for schizophrenia, early diagnosis and appropriate treatment are critical. A comprehensive treatment programme should include medication and psychotherapy such as cognitive behaviour therapy. Family interventions including psychoeducation, that is, educating the family about schizophrenia and how to cope can play a crucial role.

Conclusion

The present chapter discussed mental health problems and mental disorders encountered in the adolescent stage of development. Major factors associated with the increasing trend in mental disorders were discussed. The different mental health problems/mental disorders among adolescents were presented, highlighting the symptomatology, prevalence rate global and India, diagnostic criteria, causes, treatment, and preventive measures. The disorders dealt with were: depression, suicide and attempted suicide, emotional and behaviour disorder, childhood behaviour disorders, oppositional defiant disorder, conduct disorder, ADHD, learning disability, high-risk behaviours, eating disorders, anxiety disorder, body dysmorphic disorder, and schizophrenia.

Time to Reflect

Adolescents are perceived in various ways across societies and cultures. In western countries, they are seen as individuals on their own right and expected to live independently and start off on their own. Whereas in collectivistic societies like India, they are mostly considered as dependent and are still seen as children; though in some aspects, they are expected to behave like grown ups. Overall, adolescents are still not full adults. They are not involved with adult tasks and life's myriad responsibilities

and expectations. So, it is important that they should have good mental health. At the most they are expected to have only small issues related to their studies, education and relationship with peers around which their life revolves mostly. Though children from under privileged backgrounds have other life concerns related to basic survival and supporting the family, still they are also not perceived to have mental health problems. But we need to take serious note of the research evidence that our children and adolescents across social class and economic backgrounds do face mental health problems and mental disorders which need urgent attention. They are our most valuable future resource, and if neglected, it will not only affect their own optimal development and leading a fulfilling and productive life, but also add to the economic and social cost of the nation. WHO (2017) points out that worldwide, 10–20% of children and adolescents experience mental disorders. Half of all mental illnesses begin by the age of 14 and three quarters by mid 20s. If this is not reason enough for us to focus on adolescent mental health, then what else is needed? Children with mental disorders are the worst sufferers of it as it not only limits their access to education and health care, but also exposes them to stigma and discrimination, thus violating their fundamental rights. It is really time to have a wake up call to focus on adolescent mental health.

References

- Agrawal, S., & Agrawal, P. (2013). Adolescent risk-taking behaviour in India: The influence of socioeconomic characteristics and living arrangement. *Journal of Community Nutrition & Health*, 1, 26–31.
- Aggarwal, T., Bhatia, R., Singh, D., & Sobti, P. C. (2008). Prevalence of obesity and overweight in affluent adolescents from Ludhiana, Punjab. *Indian Pediatrics*, 45, 500–502.
- Ahmad, N., Fadhli, M. Y., Ratnasingham, S., & Mohamed, F. (2015). Trends and factors associated with mental health problems among children and adolescents in Malaysia. *International Journal of Culture and Mental Health*, 8(2), 125–136.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.).
- Anita, S., Gaur, D. R., Vohra, A. K., Subash, S., & Khurana, H. (2003). Prevalence of psychiatric morbidity among 6 to 14 years old children. *Indian Journal of Community Medicine*, 28, 133–137.
- Bahls, S. C. (2002). Depression in childhood and adolescence: Clinical features. *Journal De Pediatria*, 78(5), 359–366.
- Bhatia, S. K., & Bhatia, S. C. (2007). Childhood and adolescent depression. *American Family Physician. January issue* 75 (1).
- Bibiloni, M. D. M., Pons, A., & Tur, J. A. (2013). Prevalence of overweight and obesity in adolescents: A systematic review. *International Scholarly Research Notes (ISRN) Obesity*. Published online June 27, 2013.
- Bjornsson, A. S., Didie, E. R., Grant, J. E., Menard, W., Stalker, E., & Phillips, K. A. (2013). Age at onset and clinical correlates in body dysmorphic disorder. *Comprehensive Psychiatry*, 54(7), 893–903.
- Bronsard, G., Alessandrini, M., Fond, G., Loundou, A., Auquier, P., Tordjman, S., & Boyer, L. (2016). The prevalence of Mental disorders among children and adolescents in the child welfare system. *Medicine Baltimore*, 95(7), 2622.
- Bryan, C. J. (2010). Managing suicide risk in primary care. Springer Publishing Company.

Bryan, C. J., Mintz, J. M., Clemans, T. A., Leeson, B., Burch, S. T., & Williams, S. R. (2017). Effect of crisis response planning versus contracts for safety on suicide risk in U.S. army soldiers: A randomized clinical trial. *Journal of Affective Disorders*, 212, 64–72.

- Burton, D. L. (2008). An exploratory evaluation of the contribution of personality and childhood sexual victimization to the development of sexually abusive behavior. *Sexual Abuse: A Journal of Research and Treatment*, 20(1), 102–115.
- CDC. (2018). Youth risk behavior survey data summary & trends report 2007–2017. Center for Disease Control Division of Adolescent and school health.
- Council for Exceptional Children (CEC). (2018). https://www.community.cec.sped.org
- Cholakottil, A., Kazhungil, F., & Koyamu, A. M. K. (2017). Prevalence and pattern of psychiatric disorders in school going adolescents. *The International Journal of Indian Psychology, 4* (3). April–June.
- Cleveland Clinic. (2018). Anxiety disorders in children and adolescents. Available at https://my.clevelandclinic.org/health/diseases/6248-anxiety-disorders-in-children-adolescents
- Connolly, S. D., & Nanayakkara, S. D. (2009). Anxiety disorders in children and adolescents. *Psychiatric Times*, 26 (10). October issue.
- Dalton, M. A., Ahrens, M. B., & Sargent, J. D. (2002). Relation between parental restrictions on movies and adolescent use of tobacco and alcohol. Efficient Clinical Practicee, 5(1), 1–10.
- Das, N., Chattopadhyay, D., Chakraborty, S., Dasgupta, A., & Akbar, F. (2015). A study on health risk behavior of mid-adolescent school students in a rural and an urban area of West Bengal, India. *Archives of Medicine and Health Sciences*, *3*(2), 203–208.
- Deshmukh, P. R., Gupta, S. S., Bharambe, M. S., Dongre, A. R., Maliye, C., & Kaur, S. (2006). Nutritional status of adolescents in rural Wardha. *Indian Journal of Pediatrics*, 73, 139–141.
- Ekern, J. (2018). Eating disorders: causes, symptoms, signs & medical complications. www.eating disordershope.com
- Encyclopedia of Children's Health. (2018). Suicide and attempted suicide. Available at http://www.healthofchildren.com/S/Suicide-and-Suicidal-Behavior.html
- Erskine, H. E., Moffitt, T. E., Copeland, W. E., Costello, E. J., Patton, G., Degenhardt, L., Vos, T., Whiteford, H. A., & Scott, J. G. (2015). A Heavy burden on young minds: The global burden of mental and substance use disorders in children and adolescents. *Psychological Medicine*, 45(7), 1551–1563.
- Goode, E. (2016). Deviant behavior (11th ed.). Routledge.
- Goyal, J. P., Kumar, N., Parmar, I., Shah, V. B., & Patel, B. (2011). Determinants of overweight and obesity in affluent adolescent in Surat city, South Gujarat region, India. *Indian Journal of Community Medicine*, 36, 296–300.
- Gururaj, G., Sateesh, V. L., Rayan, A. B., Roy, A. C., & Amarnath, Ashok, J. (2008). *Bengaluru injury/road traffic injury surveillance programme: A feasibility study*. Bengaluru injury surveillance collaborators group. National Institute of Mental Health & Neuro Sciences, Bengaluru.
- Gururaj, G., Varghese, M., Benegal, V., Rao, G. N., Pathak, K., Singh, L. K., Mehta, R. Y., Ram, D., Shibukumar, T. M., Kokane, A. L., Singh, R. K., Chavan, B. S., Sharma, P., Ramasubramanian, C., Dalal, P. K., Saha, P. K., Deuri, S. P., Giri, A. K., Kavishvar, A. B., ... NMHS collaborators group. (2016). National Mental Health Survey of India, 2015–16: Prevalence, patterns and outcomes. *National Institute of Mental Health and Neuro Sciences, Bengaluru, NIMHANS Publication No.*, 129, 2016.
- Gururaj, G. (2013). Injury prevention and care: An important public health agenda for health, survival and safety of children. *Indian Journal of Pediatrics*, 80 (Suppl 1), 100–108.
- Haboubi, G. J., & Shaikh, R. B. (2009). A comparison of the nutritional status of adolescents from selected schools of South India and UAE: A cross-sectional study. *Indian Journal Community Medicine*, 34, 108–111.
- Hicks, W. A. A., Pratt, K. J., & Cottrill, C. (2018). The relationship between trauma and weight status among adolescents in eating disorder treatment. *Appetite*, 129, 62–69.
- ICD-10. (1992). Classifications of mental and behavioural disorder: Clinical descriptions and diagnostic guidelines. World Health Organisation.

- IIPS Mumbai. (2012). National Family Health Survey (NFHS-3), 2005–06. International Institute for Population Sciences (IIPS) and Macro International.
- Im, Y., Oh, W. O., & Suk, M. (2017). Risk factors for suicide ideation among adolescents: Five year national data analysis. *Archives of Psychiatric Nursing*, 31(3), 282–286.
- IDEA. (2004). Individuals with Disabilities Education Act. US Department of Education.
- Jahad, A. R., & O'Grady L. (2008). How should health be defined. BMJ, 337, a2900.
- Jha, M. K., Minhajuddin, Abu., South, Charles., Rush, A John., & Trivedi, Madhukar H. (2017). Worsening anxiety, irritability, insomnia, or panic predicts poorer antidepressant treatment outcomes: Clinical utility and validation of the concise associated symptom tracking (CAST) Scale. *International Journal of Neuropsychopharmacology*. 21 (4), 22 November.
- Juyal, R., Bansal, R., Kishore, S., Negi, K. S., Chandra, R., & Semwal, J. (2006). Substance use among intercollege students in district Dehradun. *Indian Journal of Community Medicine*, 31, 252–254.
- Karlsgodt, K. H., Sun, D., & Cannon, T. D. (2010). Structural and functional abnormalities in schizophrenia. Current Directions in Psychological Science, 19(4), 226–231.
- Kailash, S. (2016). One in five of India's drug addicts is a CHILD—Government to act. Mail Online India. Available at http://www.dailymail.co.uk/indiahome/indianews/article-4031994/Indias-courtorders-action-child-drug-abuse.html
- Khadilkar, V. V., & Khadilkar, A. V. (2004). Prevalence of obesity in affluent school boys in Pune. *Indian Pediatrics*, 41, 857.
- Kipping, R. R., Campbell, R. M., MacArthur, G. J., Gunnell, D. J., & Hickman, M. (2012). Multiple risk behaviour in adolescence. *Journal of Public Health*, 34 (supplement 1) March, 11–12.
- Kotian, M. S., Kumar, S. G., & Kotian, S. S. (2010). Prevalence and determinants of overweight and obesity among adolescent school children of South Karnataka, India. *Indian Journal of Community Medicine*, 35, 176–178.
- Kumar, G. A., Dandona, R., Kumar, S. G., & Dandona, L. (2011). Behavioral surveillance of premarital sex among never married young adults in a high HIV prevalence district in India. AIDS Behaviour, 15, 228–235.
- Kuriyan, N. M., & James, J. (2018). Prevalence of learning disability in India: A need for mental health awareness programme. First National Conference on Mental Health Education, NIMHANS Bangalore,. https://doi.org/10.4103/0253-
- Kustner, M. B, Martín, C., & Pastor, L. (2018). Prevalence of psychotic disorders and its association with methodological issues. A systematic review and meta-analyses. PLoS One, 13 (4).
- Low, K. (2017). ADD or ADHD—Symptoms, diagnosis and cause. Verywell Mind, September issue
- Machteld et al. (2011). Health: How should we define it? BMJ, 343, 235–237, 30 July 2011.
- Malhotra, S., & Patra, B. N. (2014). Prevalence of child and adolescent psychiatric disorders in India: a systematic review and meta analysis. *Child and Adolescent Psychiatry and Mental Health*, 8, 22.
- Manchia, M., Bronsard, G., Alessandrini, M., Fond, G., Loundou, A., Auquier, P., Tordjman, S., & Boyer, L. (Section editors) (2016). The prevalence of mental disorders among children and adolescents in the child welfare system: A systematic review and meta-analysis. *Medicine*, 95 (7), 2622.
- Mayo Clinic. (2018). Body dysmorphic disorder. Available at https://www.mayoclinic.org/diseases-conditions/body-dysmorphic-disorder/symptoms-causes/syc-20353938
- Mental Health Foundation. (2016). Fundamental facts about mental health. Mental Health Foundation.
- Merikangas, K. R., Nakamura, E. F., & Kessler, R. C. (2009). Epidemiology of mental disorders in children and adolescents. *Dialogues Clinical Neuroscience*, 11(1), 7–20.
- Michaud, P.-A., & Fombonne, E. (2005). Common mental health problems. *British Medical Journal*, 9, 330 (7495), 835–838

Mishra, A., Garg, S. P., & Desai, S. N. (2014). Prevalence of oppositional defiant disorder and conduct disorder in primary school children. *Journal of Indian Academy of Forensic Medicine.*, 36, 246–250.

- Mishra, N., Mishra, A., & Dwivedi, R. (2015, February 9). Prevalence of conduct disorder in primary school children of rural area. *Journal of Evolution of Medical and Dental Sciences*, 4 (12), 1917–1922. https://doi.org/10.14260/jemds/2015/278
- Nabiswa, J., Misigo, B. L., Ferdinand, N., & Makhanu, F. (2016). Analysis of student deviant behaviour most prevalent in schools of Bungoma County. *Journal of Research in Humanities and Social Sciences*, 4, 19–23.
- Nagendra, K., Sanjay, D., Gouli, C., Kalappanavar, N. K., & Vinod Kumar, C. S. (2012). Prevalence and association of depression and suicidal tendency among adolescent students. *International Journal of Biomedical and Advance Research*, *3*: 714–719.
- National Household Survey. (2002). The extent, patterns and trends of drug abuse in India. UNODC, Regional Office for South Asia.
- National Crime Records Bureau. (2012). Accidental deaths & suicides in India 2011. Ministry of Home Affairs, New Delhi, p. 317.
- National Institute of Nutrition. (2002). *Diet and nutritional status of rural population*. National Nutrition Monitoring Bureau. NNMB Technical Report No. 21. Hyderabad, p. 158.
- National Institute of Nutrition. (2006). *Diet & nutritional status of population and prevalence of hypertension among adults in rural areas*. National Nutrition Monitoring Bureau. NNMB Technical Report No: 24, p. 166.
- NCRB. (2016). Crime in India 2016 statistics. Ministry of Home Affairs.
- NICHCY. (2010). Emotional Disturbance Disability Fact Sheet No: #5 (FS5) NICHCY Disability Fact Sheet June.
- Nkhata, M. J., & Mwale, M. (2016). An investigation of the contributing factors to adolescent deviant behaviours in rural community day secondary schools with respect to the social and environmental aspects. *Journal of Child and Adolescent Behaviour*.
- Pratt, H. D., & Patel, D. R. (2007). Learning disorders in children and adolescents. *Primary Care*, 34(2), 361–374.
- Qadri, S., Goel, R., Singh, J., Ahluwalia, S., Pathak, R., & Bashir, H. (2013). Prevalence and pattern of substance abuse among school children in northern India: A rapid assessment study. *International Journal of Medical Science and Public Health*, 2(2), 273.
- Ramya, H. S., Goutham, A. S., & Lakshmi, V. P. (2017). Prevalence of attention deficit hyperactivity disorder in school going children aged between 5 and 12 years in Bengaluru. *Current Pediatrics Research*, 21(2), 321–326.
- Rao, V. G., Aggrawal, M. C., Yadav, R., Das, S. K., Sahare, L. K., & Bondley, M. K. (2003). Intestinal parasitic infections, anaemia and undernutrition among tribal adolescents of Madhya Pradesh. *Indian Journal of Community Medicine*.
- Rao, A. (2010). India and global history. History and Technology, 26(1), 77-84.
- Sagar, R., Pattanayak, R. D., Chandrasekaran, R., Chaudhury, P. K., Deswal, B. S., Lenin, Singh, R. K., Malhotra, S., Nizamie, S. H., Panchal, B. N., Sudhakar, T. P., Trivedi, J. K., Varghese, M., Prasad, J., & Chatterji, S. (2017). Twelve-month prevalence and treatment gap for common mental disorders: Findings from a large-scale epidemiological survey in India. *Indian Journal of Psychiatry*, 59 (1), 46–55.
- Sahoo, S., & Khess, C. R. (2010). Prevalence of depression, anxiety, and stress among young male adults in India: A dimensional and categorical diagnoses-based study. *Journal of Nervous and Mental Disorders*, 198, 901–904.
- Sarangi, L., Acharya, H. P., & Panigrahi, O. P. (2008). Substance abuse among adolescents in urban slums of Sambalpur. *Indian Journal of Community Medicine*, 33, 265–267.
- Sargent, J. D., Beach, M. L., & Dalton, M. A. (2004). Effect of parental R-rated movie restriction on adolescent smoking initiation: A prospective study. *Pediatrics*, 114(1), 149–156.

- Saxena, V., Saxena, Y., Kishore, G., & Kumar, P. (2010). A study of substance abuse among school-going male adolescents of Doiwala Block, District Dehradun. *Indian Journal of Public Health*, 54(4), 197.
- Sharma, J., & Sidhu, R. (2011). Sources of stress among students preparing in coaching institutes for admission to professional courses. *Journal of Psychology*, 2, 21–24.
- Singh, S., & Gururaj, G. (2014). Health behaviours and proble, mms among young people in India: Cause for concern and call for action. *Indian Journal of Medical Research August Issue*, 140(2), 185–208.
- Smith, R. (2008). The end of disease and the beginning of health. BMJ Group Blogs 2008. http://blogs.bmj.com/bmj/2008/07/08/richard-smith-the-end-ofdisease-and-the-beginning-of-health/
- Srinath, S., Girimaji, S. C., Gururaj, G., Seshadri, S., Subbakrishna, D. K., & Bhola, P. (2005). Epidemiological study of child and adolescent psychiatric disorders in urban and rural areas of Bangalore, India. *Indian Journal of Medical Research*, 122, 67–79.
- Stanley, B., & Brown, G. K. (2012). Safety planning intervention: A brief intervention to mitigate suicide risk. *Cognitive Behaviour Practice*, 19(2), 256–264.
- Swendsen, J., Burstein, M., Case, B. G., & Conway, K. (2012). Use and abuse of alcohol and illicit drugs in us adolescents—Results of the national comorbidity survey-adolescent supplement. *Archives of General Psychiatry*, 69(4), 390–398.
- Syetaz, M. V., Ireland, M., & Blum, R. (2001). Adolescents with learning disabilities: risk and protective factors associated with emotional well-being: Findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health April*, 28(4), 355.
- United Nations. (2004). World youth report: The global situation of young people. Department of Economic and Social Affairs, United Nations, New York.
- U. S. Department of Health and Human Services. (2001). Youth violence: A report of the surgeon general.
- Vijayakumar, L. (2006). Suicide and mental disorders—A maze? *Indian Journal Medical Research*, 124, 371–374.
- Wasnik, V., Rao, B. S., & Rao, D. (2012). A study of the health status of early adolescent girls residing in social welfare hostels in Vizianagaram district of Andhra Pradesh state, India. *International Journal of Collaborative Research on Internal Medicine and Public Health*, 4 (1), January issue.
- Wasserman, D., Cheng, Q., & Jiang, G.-X. (2005). Global suicide rates among young people aged 15–19. World Psychiatry. June Issue, 4(2), 114–120.
- WebMD. (2018). *Mental health and conduct disorder*. Available at https://www.webmd.com/mental-health/mental-health-conduct-disorder#3-8
- Wehry, A. M., Beesdo-Baum, K., Hennelly, M. M., Comnnolly, S. D., & Strawn, J. R. (2015). Assessment and treatment of anxiety disorders in children and adolescents. *Current Psychiatry Reports*, 17 (7), 591. July issue.
- Weingarden, H., & Renshaw, K. D. (2015). Shame in the obsessive compulsive related disorders: A conceptual review. *Journal of Affective Disorders*, 0, 74–84.
- WHO. (2001). The World Health report. World Health Organization. *Mental Health: New understanding, New Hope.*
- WHO. (2003). Organization of services for mental health. (Mental health policy and Service guidance package), Geneva.
- WHO. (2014). Health for the World's adolescents—A second chance in the second decade. World Health Organisation.
- WHO. (2015a). Mental health atlas 2014. World Health Organisation.
- WHO. (2015b). Preventing youth violence: An overview of the evidence. World Health Organisation.
- WHO. (2018). Adolescent mental health. World Health Organisation.
- Zeanah, P. D., Stafford, B., & Zeanah, C. H., Jr. (2005). *Clinical interventions in infant mental health: A selective review. In building state early childhood comprehensive systems series* (Vol. 13). National Center for Infant and Early Childhood Health Policy.