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Mental health in children: an overview

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Abstract

Definitions and concepts of mental health/disorder in adults cannot be always generalised to childhood population. Developmental psychopathology is an emerging discipline and focuses on psychopathology as developmental deviations. Temperament differs from personality, which is a combination of temperament and life experiences. Classification systems may be categorical or dimensional. Subtle damage insufficient to cause definite neurological signs or structural changes can cause behavioural problem later on. Dramatic advance has occurred in concept of psychiatric assessment of children in recent years. Prevention aims to reduce quantity and burden of psychiatric disorder in a population. Childhood psychiatric disorders have been shown to have significant continuity into adulthood.

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The number of children diagnosed with mental health problems has increased significantly over the past three decades.[1] Recent studies have found that as many as 20% of children in the United States show symptoms of a psychiatric disorder.[2]

Scientists and practitioners define 'mental health' in children aged zero to three as the development of socio-emotional competence and self-regulation as part of a context that includes parents, family, community and culture.[3] Researchers are careful to point out the distinction between mental health and mental illness. While mental health describes a range of variations in a child's ability to function successfully in his/her world, mental illness refers explicitly to psychiatric diagnoses—in short, to pathology. Regardless of how the concept of mental health is defined, scientists are quick to fall back on a more implicit understanding in which child mental health, practically speaking, is the absence of psychological disorders and pathology. Child mental health remains fuzzy and under-conceptualised in the field of child development. Because, mental illness was easier to define, the concept of positive health was ignored. But, mental health is 'not the absence of negatives but the presence of positives'.[4]

In modern psychiatry, there are different empirical approaches to the concept of mental health:

1. The ability to enjoy life is essential to good mental health or resilience – the ability to bounce back from adversity.
2. Mental health as positive psychology – as epitomised by presence of multiple human strengths.
3. Mental health as developmental maturity.
4. Mental health as subjective well-being, a mental state subjectively experienced as happy, contented and desired.

Every model has advantages and limitations. Thus, mental health was described by Freud as 'an ideal fiction' and described by Aubrey Lewis as 'an invincibly obscure concept'.

Characteristics of mentally healthy people:[5]

1. Acceptance of self, self-confidence and self-reliance characterise the mentally healthy person. An important attribute of positive mental health includes the understanding of one's strengths and weaknesses, coupled with the conviction that one's positive characteristics outweigh the negative traits. Independence, initiative and self-esteem are other indicators of positive mental health.

2. The realisation of one's potential is the underlying assumption of this dimension of positive mental health. Maslow[6] explains that self-actualisation is a motive that encourages the person to maximise capabilities and talents.

3. The person with positive mental health has a balance of psychic forces, a unified outlook on life and resistance to stress. Psychoanalysts view integration as the balance of the id, the ego and the superego. This balance

is viewed as changeable, with flexibility as the desired end result. Positive mental health refers to integration at the cognitive level, which implies a unifying philosophy of life that shapes feelings and behaviours.

4. Autonomy refers to self-determination and independence in decision making. The concept suggests that the person with positive mental health is self-directed and self-controlled. The individual acts independently of the outside world; behaviour is not dictated by environmental circumstances.

5. As a rule, "the perception of reality is called mentally healthy when what the individual sees corresponds to what is actually there".[5] Mentally healthy reality perception includes perception free from need distortion. A mentally healthy person views the world without distortions, fitting the perception to objective cues that are present, and does not reject evidence because it does not fit his or her wishes or needs.

6. Mastery of the environment refers to achieving success in some social roles and appropriate function in those roles. Positive mental health also includes the ability to have positive affective interpersonal relations. The social roles involved in environmental mastery may include sexual partner, parent and worker. Environmental mastery suggests the ability to adapt, adjust and solve problems in an efficient manner.

However, definitions and concepts of mental health/disorder in adults cannot be always generalised to childhood population. Following factors should be considered before diagnosing mental disorder in children:[7]

1. The child is continually changing and growing. Sound knowledge is therefore required of normal development and its limits. Because mental processes and behaviours change as a child develops, it is also not clear whether same diagnosis can be applied across the age range, e.g., repetitive rituals may be normal in five years old but abnormal in eight years old. Once identified as abnormal, it is again helpful to decide if abnormalities are due to delay or due to deviance from usual pattern of development.

2. Majority of childhood cases arise from an excess of behaviour exhibited by normal young people, e.g., aggression. They are seldom due to qualitatively distinct phenomena more often seen in adult conditions, e.g., hearing voices. Consequently, choosing a cut-off point to make a diagnosis is inevitably an arbitrary process. And children's difficulty often arises in the context of relationships within the family. Some or all of the problems may be in structure and functioning of the family, rather than in the individual child.

3. Information is gathered typically from multiple informants - child/parents/teachers etc. This may be non-corroborative leading to diagnostic bias and confusion, since the weight given to a particular informant may vary according to clinical condition, e.g., if parent says that child has conduct disorder (CD) features but child denies this, parent is more likely to be right. However, if the parent says that child is not depressed but examination of child reveals otherwise, it is the parent who may be ignorant of the child's true state.

4. Comorbidity is rule rather the exception in childhood disorders, further confusing clinical diagnosis. True comorbidity may arise by:

- Shared risk factors (e.g., early deprivation may lead to both oppositional defiant disorder and attachment disorder).
- Overlap between risk factors (e.g., depressed mother may genetically contribute to depression in child and provide inconstant discipline predisposing to CD).
- One disorder creating increased risk for the other (CD leading to addiction).
- Comorbid pattern itself constitutes a meaningful syndrome (e.g., depressive CD).

Epidemiology

The average overall community prevalence rate for mental disorders in children and youth is 15%. Anxiety, conduct, attention and depressive disorders[8] are the most common. It is important to note that these prevalence rates refer to clinically important disorders that cause both significant symptoms and significant impairment.

The classic Isle of Wight Studies by Rutter *et al*.[9] was a landmark two phase survey for determining prevalence of mental disorder in a sample of total 2193 school attending children, using multiple informants (parents/teachers) (screening followed by in depth assessment of selected sub sample). The one year prevalence rate of psychiatric disorder was seven per cent and M:F ratio was 2:1.

A subsequent study using similar design found rates of all types of disorders as twice than Isle of Wight, in an inner London borough.[10] One year follow up of Isle of Wight Studies[9] revealed one year prevalence of 20% in adolescents. In a recent review of 52 separate communities-based studies, mean prevalence was noted as 15.8%.[11]

There are major factors like age, sex which have direct relation. Prevalence increases with age, e.g., prevalence of ten per cent for preschoolers and 16.5% for adolescents[11] and sex wise, e.g., in preadolescents, mental illness is more prevalent in boys due to higher occurrence of behaviour problems; in adolescence, girls

have higher rates than boys because of higher rates of emotional problems, especially depression. In a review of 55 Indian epidemiological studies in community and school settings, Bhola and Kapur[12] found persistently lower rates of prevalence in Indian children (range 0.48 to 17.2%), which may be due to methodological limitations or true cross cultural differences. Higher rates of conversion disorders and mild mental retardation (MR) have been reported in India.[13] Interesting epidemiological trends over time has been reported in both positive and negative directions. Performance in intelligence quotient (IQ) tests has risen substantially around the world at all ages, a phenomenon known as the Flynn effect.[14] Average increase of three IQ points per decade has been found from 1952 to 1992.[15] Obviously, such massive shifts cannot be explained by hereditary changes within one generation. Environmental factors implicated are: improved nutrition, increased urbanisation, better quality primary education, exposure to media, especially television, more cognitively demanding jobs.

On the other hand, Ryan *et al*.[16] reported secular increase in childhood affective disorder, especially depression over time. Achenbach and Howell,[17] using the Child Behavior Checklist (CBCL) (Parent's version) over a 13 year old period, found significantly increased scores in problem items in 1989 compared to 1976. Eighteen per cent of 1989 subjects were in clinical range versus ten per cent of 1976 subjects.

Developmental psychopathology is an emerging discipline, which studies how abnormal behaviour can be understood in terms of processes underpinning human development. It forms a liaison between abnormal psychology and developmental psychology and focuses on psychopathology as developmental deviations. This discipline was defined by Stroufe and Rutter[18] as "the study of origins and cause of individual pattern of behavioural maladaptation, whatever the age of onset, whatever the causes, whatever the transformations in behavioural manifestations, and however complex the developmental pattern may be".

Various developmental theorists have given models explaining developmental underpinning of childhood mental health and disorders.

Psychodynamic developmental theories

Freud's psychosexual theory: Over the course of childhood (birth to adolescence), sexual impulses shift their focus from oral to anal to genital regions of the body. He emphasised that how parents manage their child's sexual and aggressive drives in the first few years of life is crucial for healthy personality development. Too much or too little gratification of the child's drives can cause his/her psychic energies to be fixated or arrested at a particular stage.

Karl Abraham on psychosexual stages[19]

Karl Abraham, one of Freud's earliest followers and colleagues, expanded upon the psychosexual stages, notably in 'A short study of the development of the libido, viewed in the light of mental disorders'.[20] A major contribution to the stage model was the subdivision of oral, anal and genital stages, which, as outlined by Symington, are as follows:[21]

1. Earlier oral stage – auto-erotism, pre-ambivalent
2. Later oral stage – narcissism, oral-sadistic
3. Earlier anal-sadistic stage – partial love with incorporation
4. Later anal sadistic stage – partial love
5. Earlier genital stage – object love with exclusion of genitals
6. Later genital stage – object love

Behavioural/learning theories

Traditional behaviourism: Pioneers like Watson or Skinner rejected psychoanalytic perspectives of inner drives and concluded that environment is the supreme force in child development. Adults, thus, could mould future behaviour of child by carefully controlling reinforcements and punishments.

Social learning theory: Expanding behavioural theories, Bandura and colleagues demonstrated that modelling, also known as imitation or observational learning, is the basis for wide variety of childhood behaviours. Children acquire many favourable and unfavourable responses in the absence of direct rewards and punishments, simply by watching or listening to others around them.

Theories of cognitive development

Piaget was the first psychologist to make a systematic study of cognitive development. His contributions include a theory of cognitive child development, detailed observational studies of cognition in children, and a series of simple but ingenious tests to reveal different cognitive abilities. Before Piaget's work, the common assumption in psychology was that children are merely less competent thinkers than adults. Piaget showed that young children think in strikingly different ways compared to adults. According to Piaget, children are born with a very basic mental structure (genetically inherited and evolved) on which all subsequent learning and knowledge is based. According to Piaget, children actively construct knowledge as they manipulate and explore their world. Children move through four broad stages of development, each of which is characterised by qualitatively distinct ways of thinking. In the sensory motor stage, cognitive development begins with the use of

senses and movements to explore the world. These action patterns evolve into the symbolic but illogical thinking of the preschooler in the preoperational stage. Then cognition is transformed into more organised reasoning of the school age child in the concrete operational stage. Finally, in the formal operational stage, thought becomes the complex, abstract reasoning system of the adolescent and the adult.

Vygotsky's socio-cultural theory: Lev Vygotsky focused on how cultural values, beliefs, customs and skills of a social group is transmitted to the next generation; social interaction, especially cooperative dialogues between children and more knowledgeable members of the society, is necessary for acquisition of knowledge. As adults and more expert peers help children master culturally meaningful activities, the communication between them becomes part of children's thinking.

Vygotsky's theory differs from Piaget in a number of important ways:

1. Vygotsky places more emphasis on culture affecting/shaping cognitive development - this contradicts Piaget's view of universal stages and content of development (Vygotsky does not refer to stages in the way that Piaget does).

2. Vygotsky places considerably more emphasis on social factors contributing to cognitive development (Piaget was criticised for underestimating this factor).

3. Vygotsky places more (and different) emphasis on the role of language in cognitive development (again Piaget was criticised for lack of emphasis on this aspect).

Information processing theories: In these theories, human mind is perceived as a complex system, through which information flows. Like Piaget, this model regards children as active beings who modify their own thinking in response to environmental demands. But unlike Piaget, there are no discrete stages, rather, the thought processes (e.g., perception, attention, planning) are assumed to be similar in all ages but present to a lesser extent in children. Thus, development occurs by continuous increase rather than abrupt, stage wise changes.

Theories of socio-emotional development

Attachment theories

John Bowlby, in his aethological theory of attachment, took a view of how infants build emotional bonding with caregiver. This begins with a set of innate signals by the infant that call the adult to the baby's side. Attachment develops in four stages: pre attachment phase (birth to six weeks), attachment in the making phase (six weeks to six months), phase of clear-cut attachment (six months to two years) and formation of a reciprocal relationship (two years onward).

Temperament theories

Children are born with their natural style of interacting with or reacting to people, places, and things—their temperament. In the late 1950s, temperament research began with the work of Alexander Thomas, Stella Chess and associates. The New York Longitudinal Study identified nine temperament characteristics or traits. The researchers found that these nine traits were present at birth and continued to influence development in important ways throughout life. By observing a child's responses to everyday situations, the researchers could assess these temperaments. Temperament is stable and differs from personality, which is a combination of temperament and life experiences, although the two terms are often used interchangeably.

Since the 1950s, many scientific studies of temperament have continued to show that children's health and development are influenced by temperament. We all know children who are much more challenging to deal with than other children, starting at birth. The realisation that many behavioural tendencies are inborn—and not the result of bad parenting—is perhaps one of the most important insights parents gain from learning more about temperament.

Temperament traits

The examination of a child's temperament generally occurs when the child's behaviour is difficult. Clinicians use a series of interviews, observations, and questionnaires that measure the nine temperament traits using a spectrum (scale) indicating mild to intense responses or reactions. By understanding temperament, the parent can work with the child rather than trying to change his or her inborn traits. The nine temperament traits and an explanation of the dimensions are given below.

Activity: Is the child always moving and doing something OR does he or she have a more relaxed style?

Rhythmicity: Is the child regular in his or her eating and sleeping habits OR somewhat haphazard?

Approach/withdrawal: Does he or she "never meet a stranger" OR tend to shy away from new people or things?

Adaptability: Can the child adjust to changes in routines or plans easily or does he or she resist transitions?

Intensity: Does he or she react strongly to situations, either positive or negative, OR does he or she react calmly and quietly?

Mood: Does the child often express a negative outlook OR is he or she generally a positive person? Does his or her mood shift frequently OR is he or she usually even-tempered?

Persistence and attention span: Does the child give up as soon as a problem arises with a task OR does he or she keep on trying? Can he or she stick with an activity a long time OR does his or her mind tend to wander?

Distractibility: Is the child easily distracted from what he or she is doing OR can he or she shut out external distractions and stay with the current activity?

Sensory threshold: Is he or she bothered by external stimuli such as loud noises, bright lights, or food textures OR does he or she tend to ignore them?

They found that temperament is a major factor in increasing the risk in a child who develop psychological problems or alternatively be protected from stress. Three types of children were noted:

Easy child - quickly establishes regular routines, is generally cheerful, adapts readily to new experiences.

Difficult child - irregular daily routines, tends to react negatively and intensely to new experiences.

Slow to warm up child - inactive, shows mild, low key reactions to environmental stimuli, adjusts slowly to new experience.

Theories of language development

Background about theories: The earliest theory about language development assumed that children acquire language through imitation. While research has shown that children who imitate the actions of those around them during their first year of life are generally those who also learn to talk more quickly, there are also evidences that imitation alone cannot explain how children become talkative.

Theories of language development: There are various language development theories that have been propagated by various proponents. This section briefly examines four main theories. These include behavioural theory, nativist linguistic theories, social interactionist theory and cognitive theory.

Behavioural theory

Behaviourists believe language is something that can be observed and measured. The need to use language is stimulated and language is uttered in response to stimuli. To the behaviourist, competence in the rules of language is not as important as the ability to speak it; speaking is what makes language real. Knowledge is a mental state and the structure of a language doesn't make it a language; it is the function of speaking words that makes a language a language. Skinner is perhaps the best known behaviourist who posited that children are conditioned by their environment to respond to certain stimuli with language. When children speak the language of their parents they are rewarded and become more skillful. They grow in their ability to respond in a manner that responds to the environmental stimuli given by his parents. This shapes a child's language more than knowledge of rules.[22] While most would agree that a language-rich environment helps children achieve success in communication, experts haven't been able to prove this with experiments outside the lab. The behaviourists' approach has been criticised for not taking into account the many and varied influences on a child's language learning.

Nativist linguistic theories

The manner in which a child acquires language is a matter long debated by linguists and child psychologists alike. The father of most nativist theories of language acquisition is Noam Chomsky, who brought greater attention to the innate capacity of children for learning language, which had widely been considered a purely cultural phenomenon based on imitation.[23]

Social interactionist theory

This theory is an approach to language acquisition that stresses the environment and the context in which the language is being learned. It focuses on the pragmatics of language rather than grammar, which should come later. In this approach, the beginning speaker and the experienced speaker--be they child and adult or second-language learner and fluent speaker--exist in a negotiated arrangement where feedback is always possible. The basic appeal of this approach is the importance it places on the home and the cultural environment in early-childhood language acquisition. Language, according to this theory, is not an innate ability. Rather, it develops in negotiating your environment. Hence, vocabulary is bound by context or, alternatively, by the culture within which speech is necessary and understandable.

Cognitive theory of language development

This theory was proposed by Jean Piaget. He theorised that language is made up of symbols and structures, but exhibits itself as a child's mental abilities mature. In addition, language is only one of many human mental or cognitive activities. Piaget's view of how children's minds work and develop has been enormously influential, particularly in educational theory. His particular insight was the role of maturation (simply growing up) in children's increasing capacity to understand their world: they cannot undertake certain tasks until they are psychologically mature enough to do so.

Theories of moral development

Kohlberg's theory: He organised his six stages of moral development into three general levels. He regarded the stages as invariant and universal - a sequence through

which all people everywhere pass in a fixed order, albeit not in same pace or extent.

1. Preconventional level: Morality is externally controlled, children blindly accept rules of authority figures, and actions are judged by their consequences.

2. Conventional level: Individuals continue to confirm to social rules, but not for reasons of self-interest. They believe that actively maintaining the current social system is important for ensuring positive human relationships and societal order.

3. Post conventional/principled level: Individuals move beyond unquestioning support for own societal rules; they define morality in terms of abstract principles and values that apply to all situations and societies.

Classification

Classification systems may be categorical or dimensional. They may follow uniaxial or multiaxial frameworks.

A simple diagnostic classification:

1. Emotional disorders e.g., anxiety/phobia/depression.
2. Disruptive disorders e.g., CD/attention-deficit/hyperactivity disorder (ADHD).
3. Developmental disorders e.g., MR, autism spectrum, language disorders.

A new diagnostic framework – 'Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood' has been introduced for zero to three years olds (DC:0-3) taking into account of unique developmental issues of very young children like primary diagnosis, relationship disorder, medical and developmental diagnosis, psychosocial stressors, functional-emotional developmental level.[24]

In contrast to the above categorical systems, Achenbach and Edelbrock[25] has given a dimensional system based on scores obtained on CBCL, which is also available in Indian adaptation, Childhood Psychopathology Measurement Schedule (CPMS) by Malhotra *et al*.[26] The two major dimensions factorially derived were: internalising disorders, include emotional disorders (anxiety/depression/summarisation) and externalising disorders, include conduct and hyperkinetic disorders.

Factors influencing mental health in children

These factors may be risk factors or protective factors. Again, risk factors may be predisposing, precipitating and perpetuating/maintaining. Predisposing factor increases vulnerability of children to develop psychological problems. Precipitating factor triggers the onset or exacerbation of psychological problems. Perpetuating factor maintains psychological problems and prevents their resolution, once they have developed. Protective factor prevents further deterioration and have implications for prognosis and response to treatment. Any causally related factors may again be personal, referring to individual biological or psychological characteristics of the child, e.g., family history and temperament; contextual, referring to features of child's psychosocial environments, e.g., school/peer group influences.

Risk factors

Biological

Genetic factors: Recent population based twin and adoption studies demonstrate that development of various discrete disorders as well as predisposition/vulnerability characteristics like intelligence or temperament is greatly influenced by genetic factors. Size of this genetic influence has been estimated to account for 30-60% of overall variation within a population.[27]

Mechanism is usually non-mendelian and polygenic. Direct or strong genetic influences have been identified for limited disorders like Tourrette disorder/autism/juvenile bipolar disorder while other wise genetic influences are mediated indirectly via broader characteristics like temperament.[28]

Prenatal/perinatal complications: Intrauterine environment may entail hazards which compromise healthy development of fetus.[27] Perinatal/birth complications are commonly associated with forceps delivery, breech delivery and prolonged or obstructed labour, leading to foetal distress/injury during birth canal passage. Premature infants are particularly susceptible to brain injury during birth due to poorly formed skull vault. Perinatal damage is most commonly associated with developmental delays/hyperactivity.[29]

Physical injuries/diseases: Organic brain disorders especially head trauma/epilepsy are one of the strongest predictors of later psychological problems.[10] Childhood injury may result in cognitive impairment, disinhibition and behavioural problems. Extent of sequelae is related to severity of damage but not closely to the site/location. Progress is also related to the social context in which recovery occurs.[30]

Head trauma sequelae in children differ from adult in following ways:-

1. Capacity to compensate: Immature brain is more able than adult brain to compensate for localised damage e.g., hemispherectomy in early childhood may be followed by normal language development.

2. Delayed effects: Early damage may not become manifest as a disorder until late stage of development.

Often, subtle damage insufficient to cause definite neurological signs or structural changes can cause behavioural problem later on - this concept known was known as 'minimal brain dysfunction'.

Childhood epilepsy especially temporal lobe epilepsy, often contributes to psychiatric disorder in following ways:-

A. The brain lesion causing epilepsy may cause psychiatric disorder.

B. Psychosocial consequences of seizures may be contributory.

C. Anti-epileptic drugs may contribute through side-effects (e.g., phenobarbitone and hyperactivity).

Other disorders associated with increased risk:-

A. Meningitis/encephalitis
B. Hypoxia resulting from near drowning/electrocution
C. Childhood human immunodeficiency virus (HIV) infection
D. Chronic lead poisoning (low IQ and hyperactivity)[31]
E. Chronic medical illness, not involving central nervous system (CNS), like asthma/diabetes/renal failure/cancer[32]

Psychological

Individual psychological characteristics of child may be contributory.

Temperament: In a 26-year-old longitudinal follow up study, Chess and Thomas[33] studied outcome of three types of temperament. Initially, an easy temperament was found in 40%, difficult temperament in ten per cent and 'slow to warm up' temperament in 15% of children. Easy temperament was a protective factor, while difficult temperament predicted future psychological difficulties. These children experienced more conflict and negative reactions from care-givers/peers/teachers. Prognosis for 'slow to warm up' children was intermediate.

Intelligence: Low IQ and MR are associated with increased psychiatric disorder up to 23 times.[34] This dual diagnosis entails major additional handicap and impairment of adaptive behaviour.

Immature/neurotic defense mechanisms: When excessively used, allow child to regulate anxiety in short term but entail long-term difficulties.[35]

Coping strategies: These may be problem focused or emotion focused and is used consciously in crises. Use of dysfunctional coping strategies like avoidance of a problem/alcohol or drug use, maintain or exacerbate long-term difficulties.[36]

Other cognitive distortions in children that contribute to future risk:

1. External locus of control[37]

2. Low self-esteem[38]

3. Deficient self-regulatory beliefs, e.g., depressive attribution style and school based learned helplessness.

Socio-environmental

A. Parental and familial factors

Attachment/bonding: Ainsworth *et al*.[39] first described patterns of mother infant interaction following brief episode of experimentally contrived separation denoted as 'strange situation'. Three types of attachment were: secure attachment, anxious attachment and resistant attachment. Lack of secure attachment predicts future psychological problem.[40]

Parental separation and loss: Psychiatric morbidity has been found to be persistently higher in bereaved children than controls, at both short term and long term follow-up. Depression and anxiety disorders occur most commonly but alcohol and drug use in males is particularly high.[41] However, bereaved children may show resilience in presence of various protective factors.

Parental psychiatric/medical illness: Besides contributing to genetic transmission, parental illness also adversely affects children via environmental mechanisms like insecure attachment, chaotic family environment, marital disharmony and economic difficulties. Parental depression is associated with three fold increased risk of depression in offspring, as well as increased rates of phobias/panic disorder/alcohol dependence and CD.[42] Parental substance use[43] and personality disorders contribute to CD and substance abuse.[44] Parental chronic physical illness like cancer/acquired immunodeficiency syndrome (AIDS)/heart disease cause increased risk for anxiety/low self-esteem and poor social skills.[45]

Parenting style: Four types of parenting styles have been described with different developmental outcomes of the child.[46] Authoritative style is a protective factor with maximum benefit to child.[47] Authoritarian style results in shy/anxious child. Permissive style results in poor impulse control. Neglecting style results in conduct problem.

Parental marital status/relationship: Parental divorce is associated with psychological/behavioural problems, especially in short term with boys, with particular risk for conduct problems and academic failure.[48] More than the divorce itself, marital discord/conflict preceding divorce especially increase risk of conduct problems. Single parent and step-parent/reconstituted families show higher mean

levels of emotional problems and educational underachievement.[49]

Dysfunctional/disorganised family environment: Apart from above family related factors, increased risk for both externalising/internalising disorders in children is associated with inconsistent/unclear rules, ineffective monitoring and supervision, lack of intellectual stimulation, over punitive/harsh discipline, excessive use of corporal punishment, younger maternal ages (especially teenage mothers), large family size, abnormal parent child interactions like hostility/lacking of warmth/disengagement/overprotection/inadvertent reinforcement of undesirable behaviours.

Child abuse and maltreatment: Child abuse includes physical abuse/sexual abuse/emotional abuse and neglect. Physical abuse (non-accidental physical injury) results in 'battered child syndrome' and results in physical squeal as well as behavioural problems like poor social skills, chronic oppositional and aggressive behaviour and academic failure.[50]

Sexual abuse[51] can lead to wide range of psychological sequelae:-[52]

Affective symptoms: phobia/posttraumatic stress disorder (PTSD)/depression

Behaviour problems: CD, hyperactivity, sexualised behaviour, self-destructiveness

Cognitive functioning: educational/language difficulties

However, ultimate risk is tempered by effects of both quality of family environment and nature of subsequent life events.

Neglect (physical, emotional, medical care and educational) results in failure to thrive (psychosocial dwarfism), developmental delays, attachment disorders and conduct problems.

B. Peer related factors

Beyond family, relationships with peers provide the social, emotional and cognitive development of the child. Increased risk may be caused by:[53]

a) Rejection /isolation by peers: results in low self-esteem and poor social skills.

b) Affiliation with behaviourally deviant peers: predispose to conduct problems.

C. School related factors

School life brings its own particular demands and challenges. Adverse influences include:[54] frequent change of school, chaotic school environment, absence of consistent discipline/rules, corporal punishment and bullying in school.

D. Community related factors

1. Poverty and social disadvantage: Lower socioeconomic class and persistent financial difficulties are strongly associated with difficulties in cognitive skills and educational achievements.[55]
2. Urban inner city residential area: Risk of disorders were doubled in some studies.[10]
3. Increased community violence, criminality and unemployment.
4. Lack of supportive community and social network.
5. Increased prevalence of alcohol and substance use.

Protective factors

Biological factors:[56] Good physical health, absence of genetic vulnerabilities, no history of serious illness or injuries, uncomplicated birth, adequate nutrition, female gender before puberty and male gender thereafter.

Psychological factors:[55] Easy temperament, high level of intellectual ability, high self-esteem, use of mature defenses and functional coping.

Familial factors:[47] Secure attachment, authoritative parenting style, parental marital harmony, involvement of father in child-rearing, explicit/consistent family rules, clear and direct communication.

Educational factors:[54] High quality day-care, preschool early intervention educational programme, favourable school environment with firm authoritative leadership, involvement with peer group.

Assessment

Dramatic advance has occurred in concept of psychiatric assessment of children in recent years, as follows:

1. The identification of child as key informant.
2. The reemergence of descriptive psychopathology instead of psychodynamic formulations.
3. The emergence of more highly specified diagnostic criteria for child and adolescent disorders.
4. The development of structured diagnostic interviews for children, parents and teachers.
5. Increasing awareness that diagnostic comorbidity is the norm.
6. Importance of identifying both strengths and weaknesses in a particular child.

Prevention

Prevention aims to reduce quantity and burden of psychiatric disorder in a population and may act on primary, secondary and tertiary levels. Primary prevention may involve two approaches.[57] Targeted interventions

aimed at selected high-risk group of children and families, e.g., child care training for single mothers in lower social class. Universal interventions aimed at benefit for entire populations e.g., primary education for everyone. To be effective, intervention measures should have following features: must be active and persistent, must start at an early age, must be rooted in developmental processes, and must address the needs of child's individual environment. Prevention approaches to CD has been most established and successful. Evidence in support was found for the following interventions in high risk children:[58] home visits by nurses, compensatory preschool education, social skills and problem solving training.

Course and outcome in child psychiatry

Childhood psychiatric disorders are generally associated with poorer outcome and graver prognosis than their adult counterparts.[56] Individual disorders have been shown to have significant continuity into adulthood either in a diagnosis-specific manner or in terms of nonspecific psychosocial impairments.

Important questions addressed in outcome studies in children are:[56] What happens to the children diagnosed to have psychiatric disorders? What is natural course of the disorder? Do these children continue to suffer from the same or some other psychiatric disorder? Does any specific intervention alter the course of the disorders favourably and to what extent?

Conclusion

It is evident that mere extrapolation of research data from adults to childhood populations is undesirable and untenable. Childhood mental health and disorder appears to be different in many aspects of diagnosis, management and outcome, from their adult counterparts. There is an unfortunate dearth of research in fields of paediatric epidemiology, clinical assessment, pharmacological and psychosocial management, which needs to be addressed systematically in future.

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