Assessment of Children and Adolescents

Clinical Practice Guidelines

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Need for Clinical Practice Guidelines for assessment of Children & Adolescents

Assessing children and adolescents is challenging. More often than not the child/adolescent in question may not have initiated the referral/consultation or may not be in agreement with the need for a consultation. Clinical assessments with children and adolescents are elaborate and require the clinician to be astute and conscientious in obtaining information from multiple sources and settings. The consultation may or may not be sought for the most impairing problem at hand. While children are able to report the nature of symptoms, sometimes, they may not be very good at reporting timing and duration of their problems. They may not report the problems if they are embarrassing or show them in bad light. Thus, information needs to be obtained from mutiple sources, i.e. the child, parents, teachers and other caregivers. There are bound to be some discrepancies in report, but generally all information obtained is useful during diagnosis and management of the child and family. The assessment and treatment are typically multidisciplinary; therefore gathered information has to be shared across professionals involved in the care of a child and family. These Clinical Practice Guidelines (CPG) aim to be an aid to mental health professionals to

a) gather, collate and structure information from multiple sources, including multidisciplinary team members
b) develop a comprehensive understanding about the child's problems

The term "child" in these CPG will be used for all children between 0-12 years of age and the term "adolescent" for those between 13-18 years of age. Wherever needed, to further delineate the early developmental period, the term "infant" will be used for children 0-12 months of age and "toddler" for children between 12-36 months of age. Given that children have to be evaluated and managed in the context of their caregiving environment, parents and the extended family are important informants and are an integral part of the treatment plan. In these CPG, the term "parents" will be used for the biological/adoptive parents of the child, and the term "family" will be used for all other individuals who live in the same household (siblings, grandparents, other members of a joint family, etc.). For any other individual involved in the primary caretaking responsibilities of the child, the term "caregivers" will be used. These guidelines must be used with an understanding and grasp of child development and childhood mental health disorders.

These CPG covergeneral principles to be followed in the assessment of children and adolescents who present to a clinic. These principles are not restricted to any particular psychiatric presentation or any specific context of evaluation. Assessments for forensic and legal purposes are beyond the scope of this chapter.

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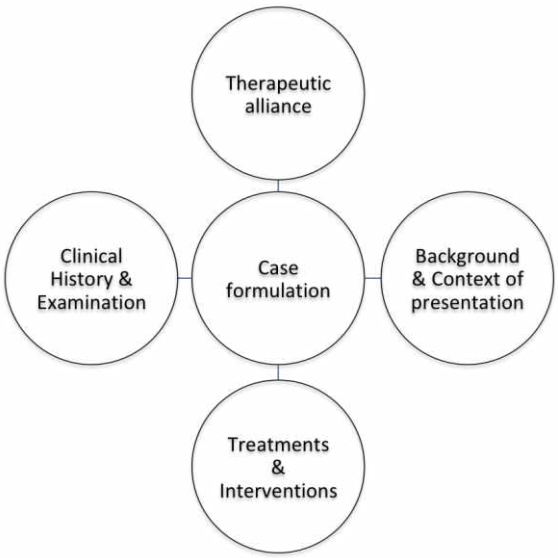
Objectives of Clinical Assessment

The central goal of a clinical assessment is to come to a case formulation that would then guide management decisions.[1] Delineating the signs and symptoms through a detailed clinical history and examination help ascertain the key areas of concern and the presence (or absence) of a mental health disorder. In order to adequately comprehend the origins, maintenance and factors affecting remission from the disorder, it is essential to place the child within a psychosocial background, relate the presentation to his/her unique context and to gather details about what has happened to the illness so far, especially what has been the treatment and response history. On the face of it these components appear factual, however, it is often challenging to getconsistent, continuous, corroborative information from the child and family. This is where a therapeutic alliance becomes vital. If the child and the family perceive a mutual beneficial relationship, the elucidation of facts becomes more meaningful and useful, and it leads to shared intervention goals. The case formulation, a culmination of these individual components, adopts a holistic view of the child's problems, helps in treatment planning, including assigning roles and responsibilities to the multidisciplinary team. Finally, it is important to be aware that a clinical assessment aids the child and family in developing a clearer understanding of their own difficulties, and, through the assessment process, gives them an opportunity to reflect on the information they share.

The emphasis on a therapeutic alliance is limited in the context of a forensic/legal evaluation of a child and family. In this scenario, the person conducting the clinical assessment may not be part of the treatment team. It is important, therefore, to check if the child/parents are aware of and understand the reasons for referral. The clinician should clarify to them the need for the evaluation, and what would happen to the evaluation results.

Figure 1: Objectives of clinical assessment in child and adolescent psychiatry



Part I: Establishing rapport with a child

Every health professional working with children would agree that interacting with children is no child's play! As adults we often find ourselves at a loss of ideas when interacting with children; as health professionals we also tend to get preoccupied with 'saying the right thing', and worrying about whether the child will 'abide' by given advice. Getting caught up in these anxieties could impede assessments and therapeutic work with children. It may be easier to empathize with adults because we have a more accessible frame of reference in ourselves. Adults *are not* children, but they *have been* children, i.e. we need to on several occasions recall childhood experiences from our own lives, from the lives of our siblings and peers, to draw parallels, to truly understand the predicament a given child may be in.

Sometimes clinicians can neglect establishing a rapport in their work with children and practice purely paternalistic medicine. In child and adolescent mental health as with any other branch of medicine, there is a need to respect the child's autonomy as well as look out for their best interests. Shared decision making as far as possible along with selective paternalism where needed is the best form of practice especially with children and families.[2] While establishing rapport a common error made by practitioners is the assumption that communicating with the parents is enough, and that interventions in children occur through parents. This is not untrue, given that a lot of parent training and parent-child work forms a major component of intervention in childhood disorders. However, it has been repeatedly shown in research that the clinician's and the therapist's relationship with the child independently affects intervention outcomes. We mentioned earlier that children may not be in agreement with the need for a consultation, but we must also know that children are aware of the processes and are trying to make sense of discussions around them that are about them! Therefore, direct communication with the child, acknowledging the child's understanding about the situation, and building even a simplistic but shared understanding plays a huge role in the effectiveness of interventions.

The purpose of developing a rapport with a child must be clear in the clinician's mind. Immediate compliance to the clinician's advice is not the goal. Patterns of behavior, whether they be developmental, psychopathological or environmental, establish over a substantial period of time. It is a little hasty, then, to expect the remission of these issues without adequate time and comprehensive addressal of contributory elements. Good rapport with a child is in fact done with a long-term agenda, of providing the child a safe, confidential, non-judgmental place to 'unburden' and discuss possible solutions to their difficulties. Simply put, if a child is in trouble, he/she must be able to share it with the clinician honestly, rather than cover it up, which might in turn expose the child to additional trouble. Compliance, therefore, becomes a byproduct of the long-term therapeutic alliance with the child. In addition, the child must also know what the limits of the confidentiality are - harm to self, harm to others, abuse, are issues that have to be taken out of clinician-child confidentiality for systematic intervention. This must be communicated to the child and be reiterated over the course of consultations.

A child-friendly space for assessment of children and adolescents

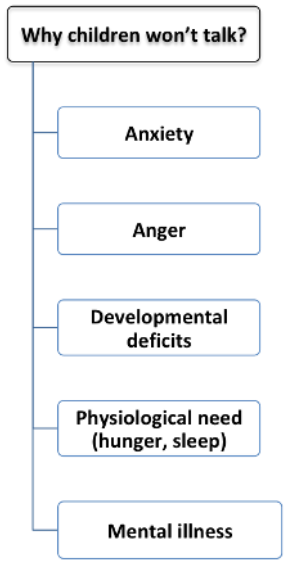
The clinical setting for assessment of children and adolescents should be able to engage the child's attention for the requisite duration of time. The waiting period and meeting with a doctor could intimidate children, making them irritable and uncooperative during assessment. It is for this reason that most child clinics pay special attention to the appearance of the place, the availability of toys, books, play spaces to keep children

engaged. Simple things such as walls painted in bright colors, with cartoon characters and fables keep the children engaged and want to come back to the place, should repeat consultations be required. Having a few large blackboards with colored chalks are another engagement tool. The clinician should have toys, play objects, papers and color pens available in the consultation room. Play and drawing activities can help break the ice and engage the child in the assessment process. Play is also used as a standalone assessment tool with preschool children who may not have the verbal repertoire to narrate distressing experiences. The staff and attendants in child clinics need to be attuned to the presence and activities of children. In fact, staff should make active attempts at keeping children engaged.
Challenges in establishing rapport

The silent child

A major challenge in establishing rapport comes when a child does not talk during the consultation. There can be several reasons behind this. The clinician must be open to examining the various possibilities and address them accordingly. This of course will take some of the consultation time and the clinician must be prepared for the same. The idea of getting behind these various reasons may not always be to get the child to talk before the consultation is over, rather it is to communicate to the child that the clinician is really keen on knowing what the child wants to say and that the clinician appreciates the child's reasons/difficulties that are a barrier to talking *now.*

Figure 2: Understanding a child's silence during assessment



One of the commonest reasons behind a child's silence is anxiety. This may arise out of a child's slow to warm up temperament; with repeated visits the child may gradually open up. The clinician could get an idea about this from the temperamental history of the child. The clinician should avoid intimidating the child by compelling him/her to talk. The child should be allowed to ease into the consultation process at his/her own pace. Talking about the child's favourite games, school and other neutral topics would help put the child at ease before encroaching upon the clinical context. Anxiety could also arise from more proximate factors - presence of a mood/anxiety disorder, history of trauma/abuse, authoritarian parenting where the presence of parents/caregivers may cause the child to be more anxious. If the child assents, speaking to him/her alone could also help clarify reasons behind the apparent anxiety.

Many a times children are angry about being brought in for consultation. Asking the parents what the child understands about the consultation is one way of getting an idea about this. Often parents do tell that they have brought the child on some other pretext (consultation for a parent, concerns about academics even though the real reason may be disruptive behavior), or that they have just coerced the child into coming in for the consultation. Issues like these can be quite challenging for the clinician. While one may question the rationale and judgment of parents in doing so, the clinician could try and understand it from a helplessness arising out of aggressive behavior from the child or a parenting skills deficits in

the parents. Sometimes parents may even reach out to the clinician before they bring in the child.These situations typically arise with older children and adolescents. It is advisable to have a separate interaction with the child, which would involve a process beginning with introducing oneself, giving the child time to respond, and gradually moving towards establishing the context of the interaction. Acknowledging the child's emotion and communicating an interest in understanding the child's perspective is crucial in reassuring the child that they will be heard and their concerns addressed without use of any coercion or deception. While it is important to acknowledge concerns and emotions in both the parents and the child, it is crucial that from the beginning the context of the consultation is established with the family. The child and the family could be addressed together, and some common concerns mentioned as a context for continuing consultations and work with the family. When children do not acknowledge the issues at all, using phrases such as "I can see that you and your parents have been *unhappy*... I would like to understand this better and help..." may be useful rather than make the youngster the sole reason for the consultation.

Children with developmental delays, or specific deficits in for instance, speech and social skills may find it difficult to express themselves. Unlike the previous two scenarios, the focus here shifts from handling the child's emotions to interacting with the child at his/her developmental level. Play methods are used in the assessment of toddlers and preschoolers. Such young children may not have the intellectual, verbal and social capacity to express themselves coherently, however, their experiences and memories are often engraved in their behavior that can be observed during play (e.g. a child who has witnessed/experienced a traumatic event may enact the same during play). With very young children, physiological needs - sleep, hunger, any form of physical discomfort may cause distress and make the child uncooperative during assessment. Parents are usually able to identify these needs and the clinician should accommodate requests to address them. In fact, assessment of very young children such as infants and young toddlers must be scheduled at a time that they are awake, alert and cooperative.

Presence of depressive/anxiety disorders could also underlie a child's silence. Selective mutism is a specific case in point. Children with this disorder have a history of not talking in social situations, other than those involving family members and other familiar adults. The child can be engaged through nonverbal means, like writing, drawing and gestures. A lot of children have comorbid social anxiety. With repeated interactions and reassurances the child may open up gradually. Systematic interventions for the anxiety disorders must be pursued for lasting changes in interaction. Psychotic and obsessive-compulsive disorders can be another area where the 'fearful' content of a child's experiences could inhibit him/her from sharing information with the clinician. It therefore becomes important to keep the efforts at interacting with the child going; over follow-ups rapport and the information the child may be ready to share go up. Children may also present with mutism and posturing as catatonic symptoms. Once identified standard assessment formats, e.g. Kirby's method[3] for examination of uncooperative patients must be followed.

The 'difficult' child

Older children and adolescents are often not keen on the consultation themselves especially where there are issues like disruptive behavior and substance abuse. The adolescent may be weary of being reprimanded and pulled up for his/her behavior or may be embarrassed to

have his parents discuss his behaviour with others including the mental health care professional. Sometimes adolescents may also not recognize the extent to which their behavior is problematic because their peers engage in similar behavior, e.g. playing games on the mobile. Family conflicts, which may include violence, both toward caregivers or objects in the environment, could be due to emotional distress,which the adolescent expresses through violence, and the adolescent may justify aggression as being 'the only way' to deal with a particular situation.
It is paramount that every effort be made to gain the confidence of the child/adolescent. The efficacy of intervention is affected by the clinician's ability to establish a common ground with the child/adolescent. Older children and adolescents are in the phase of development where they are establishing their self and group identities. They may be extremely sensitive to any disapproval of their peers or interests or behaviors. In an effort to 'protect' these, they may refuse to talk about these issues. It is prudent to begin such interviews on a neutral ground. General enquiries about how the child/adolescent has been, how school has been going, what their interests are, celebrities they admire/follow, etc may help the clinician ease into establishing a rapport. It would be useful for the clinician to be familiar with latest trends in TV, cinema, music, sports, games! This could facilitate in efforts to engage the young person. However, it is important to not overly try to identify with the adolescent as that could appear artificial; rather a genuine interest, asking the child/adolescent to help the clinician understand their interests, may be more appealing. It is also important to acknowledge that the child/adolescent may not want to talk about the 'problem'. The clinician must convey a keen interest in wanting to know the child/adolescent's perspective, and that he/she would be willing to do so whenever the child/adolescent is ready.

While children/adolescents are not keen on sharing information, parents might come with a very different agenda. They may expect the clinician to figure out the problem by doing some 'tests', and "counsel" the child whereby the child will stop all their negative behavior. Giving the parents a biopsychosocial perspective of the problem may go a long way in working with them. The cognitive, social and emotional developmental changes in this age group, and the longitudinal and multi-factorial nature of the problem are key aspects to be discussed with the parents so that they appreciate that there are no 'quick fixes' and that 'advice from the clinician' may not be effective unless the underlying issues are addressed systematically. At the same time, the clinician must validate that the parents concern is legitimate and a holistic approach is necessaryto improve outcomes.

A major challenge that frequently presents itself in clinical practice is that children tend to be brought in for consultation as they enter important academic levels, especially in high school (class 10/SSLC), as parents feel that the child's behaviour is affecting or might interfere with board exam results. It may also be that the school referred the child on noticing sub-average academic performance, and that the parents haven't really identified any concern themselves.Clinical histories usually reveal that the 'problem' has been there for several years but parents have so far accommodated the problem rather than addressed it. Clinicians need to be cautious here. Giving hope about the problem's resolution must not come at the cost of negating the reality. One could empathize with parents about their concerns and reassure them of support. Yet, the developmental and longitudinal perspective must be conveyed here too. We know from clinical data that issues like developmental disorders, temperamental difficulties, and severe disruptive behavior disorders are chronic

problems with heterotypic continuities into adulthood.[4] We need to educate parents and keep this framework in mind while working with parents and children/adolescents, too.

Gathering information from both parents and child

It is imperative to get a narrative account of the clinical history from both the parents and child. The parents account is from a perspective of what they 'see' the child do, i.e. it is primarily based on observations of the child's behavior. However, we know that behaviors do not exist in isolation. There are the additional layers of emotion, thought, experience and context to truly understand the origins and implications of a child's behavior. Figure 3 illustrates this. Parents are more likely to report externalising symptoms and children and adolescents are more likely to report internalising symptoms.Interviewing the child and parent together or separately is a clinical judgment call. However, situations where one absolutely must talk separately to the child include - older children or adolescents, history suggestive of parent-child discord, peer relationship issues, history of trauma/abuse, and children staying in child care institutions.A practical way of conducting these interviews would be to speak to the parents of young children separately before or after seeing the child together with the parents to observe the child and observe the interactions between the parents and the child. In the case of adolescents, they must be included in the initial interviews and thereafter must be spoken to separately first before conducting the parent interview. This is because the therapeutic alliance with the adolescent is likely to be shaky if the adolescent does not trust the treating clinician.

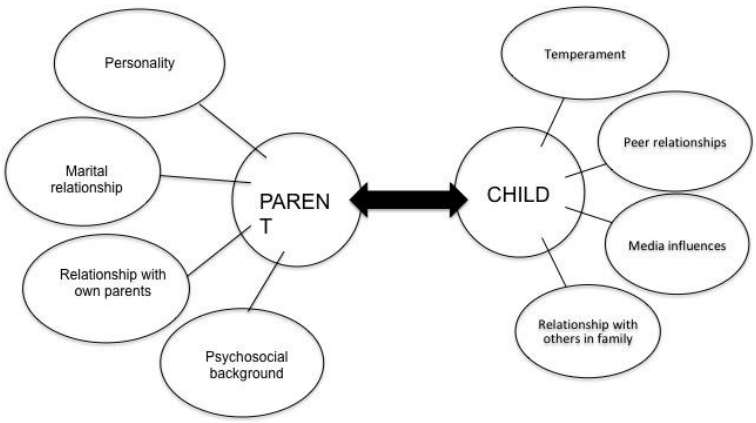
Figure 3: Understanding a child's behavior

A 12 year old boy was brought by his parents with complaints of hitting his siblings over small quarrels about sharing toys and food (*behavior*) over the last 6 months. On speaking with the family and child separately, it was learnt that at school (*context*) classmates had been making fun of the child because he was overweight (*experience = bullying*). They would stop only if he shouted or threatened to hit them. The boy felt that aggression for the only way to get things done (*thought/inner voice*), and he felt angry (*emotional response*) most of the time. Whenever his sisters fought with him over toys or food, he would get angry and hit them.

Parents and children come from their own personal histories, i.e. their understanding and expression of the 'problem' is colored by their developmental, familial, and other salient experiences. It should therefore not surprise the clinician when stories do not match, or

concerns vary widely between the parents and the child. Figure 4 illustrates salient influential factors for the parents and the child.

Figure 4: Factors influencing parent and child report



P*art II: Background and context of presentation*

Typically, the first level of contact for most children and adolescents is not a mental health professional. Pediatricians, and neurologists may be consulted first. Sometimes, difficulties that the child is experiencing behaviourally, emotionally or with respect to academics may be noticed by the school teachers and he/she may bring it to the notice of the parents. The referral context and process sheds light on the nature of problems, the functional impact, and the knowledge, attitude and practices of the parents and family. It can consequently have implications on the future plan of management. The clinician must assess the presenting problems from a developmental perspective, with due importance to developmental presentations of mental illnesses. Comorbidity, especially developmental disorders co-occurring with psychiatric disorders is common in child and adolescent psychiatry. Thus, in all children and adolescents, assessments must include:

a) Developmental trajectories and attainments
b) Evaluation of the presenting behavioural and emotional problems
c) Evaluation of current functioning of the child/adolescent in various settings
d) Understanding of the strengths/assets of the child/adoloscent and the family
e) The highest level of functioning attained by the child/adolescent prior to the onset of current concerns

Some key questions that must be posed to each family coming in for a consultation, in order to understand the referral context are presented in box 1. Children and their families may or may not sufficiently understand the medical/ psychological/psychiatric nature of their predicament. It is not uncommon to find that educational inputs to the family have to be

"Who has referred the child?"
"Why did they refer the child?"
"Why did they refer the child NOW?"
"Is there a referral letter? What is the key concern expressed in the letter?"
"Is there any administrative concern?"
"Do the parents/child understand the context/reasons for the referral?"
"Are there any reports– school, social agencies, previous evaluation/assessment?"
"Are there any other medical records available?"

Ongoing concerns:
"Have you had any concerns about the child's behavior, or psychological condition?"
"Could you please tell me what kinds of difficulties have you noticed in the child's behavior?"
"Have you been concerned about any developmental issues in your child?"

Presenting complaints:
"What made you seek help for your child now?"
"Are there any specific reasons that have made you seek help now?"

carried out over several sessions to ensure they have an adequate understanding. The point here is that when children and parents come in for a consultation that has not been initiated by them, the clinician must look into all available documentation available and trace the pathway of the referral process. This establishes a common context for the consultation. It also helps prioritize the nature and schedule of systematic assessment and intervention.

Box 1: Questions to understand the 'referral'

Part III: Clinical history and examination

A. Know the child and the family - the socio-demographics

Clinicians are busy people. Spending the first few minutes of the assessment in getting to know the family, however, is a great tool in developing rapport and adds to the understanding of the context of consultation. In India, for instance, there is a wide variation in parenting and social norms. Educational, occupational, residential and religious backgrounds can give the clinician a frame of reference for 'where the family is coming from' and the context of the parent-child conflict. It is therefore important to ask some background details. Also, for the child/family to walk into the clinician's consultation chamber can be an intimidating experience. Basic information gathering gives them some time to gather their thoughts and adjust to the consultation situation before getting to discussing the 'problem'.

B. Ongoing concerns & Presenting complaints

In child and adolescent psychiatry, when a clinician enquires about the problem, parents and children may be unclear about the extent or nature of the problem. For instance, in children with developmental delays, parents may only focus on the fact that the child does not speak, or school refusal may be the presenting concern in a child who has in fact had a long-standing mood or disruptive behavior disorder. Development so intricately intertwines with the child's experiences and the parent's repeated attempts at handling difficulties that the clinical picture is, more often that not, complex. The clinician must give the parents sufficient time to describe all that they have to say and identify the behavioral domains that exist in a given child. The clinician should, as a rule, identify both ongoing concerns and presenting complaints. Ongoing concerns would comprise of all the developmental, psychological, emotional and behavioral concerns over time, while presenting complaints are what precipitated the current consultation. For example, a child with long-standing attention-deficit

hyperactivity disorder (ADHD) may have always had complaints from school about incomplete work, restlessness in class, and impulsive anger outbursts, however, the current consultation was precipitated by the school wanting to know if the child is academically capable of writing board exams. While the real solution lies in addressing the ADHD through pharmacological/behavioral interventions, the urgent issue is communication with the school about the nature of the child's problems and the manner of addressal. Some key questions that could help elucidate ongoing concerns and presenting complaints are depicted in box 2.

Box 2: Questions to elucidate chief and presenting complaints in a child

C. Clinical history of the child's problems

It is ideal if the parents can narrate the concerns they have had about the child from the 'start' in a chronological manner, covering details about when they sought what consultation and how it impacted the child, gains and any adverse reactions. This ideal scenario does not exist in child and adolescent psychiatry. Unlike in adults, the premorbid self is an evolving entity in children and adolescents, and environmental contexts impact a child's behavior significantly. Parents are therefore at a loss for how to describe the onset, and course of concerns. Initially, the parents must be allowed to talk about the concerns in whichever manner they want to, starting at whatever point in the child's life they want to. This brings to light the most prominent concerns and the most salient accounts of the complaints. During the parents' narrative, however, the clinician must note the behavioral symptom profiles that the parent is talking about. Some examples of typical complaints arising from different symptom domains are depicted in the Table 1 below. Complaints pointing towards specific symptom dimensions must thereafter lead into an enquiry about differential diagnoses under that domain. For instance, a child presenting with developmental concerns must be evaluated for intellectual disability, autism spectrum, specific speech and language developmental disorders and attention deficit hyperactivity disorder. The clinician must bear in mind two important phenomenon –*diagnostic overshadowing and masking in phenomenology*. Sometimes psychiatric disorders may be missed in children with developmental disorders, because all behavioral symptoms may be considered a part of the developmental disorder, thereby *overshadowing* primary treatable psychiatric conditions. Presence of developmental disorders can modify or *mask* the manifestations of a primary psychiatric disorder,by the presence of cognitive, language or speech deficits, especially when the developmental disability is severe, e.g. mood disorders in children with developmental disorders may present with excessive laughing or just increase in stereotypic behaviors.

Children may present with more than one symptom. It is important to decipher the order of development of symptoms, e.g. a child who presents currently with 'fainting spells', may have had an onset of staying withdrawn, then irritability, then refusing to go to school, and then fainting spells started around exam time. This sequential order of the complaints gives better insight into underlying psychopathological states and helps in management. The clinician must also enquire about the 'peak of illness/diability' in the ongoing concerns, and the circumstances around then. For any discrete behaviors, such as dissociative phenomenon, aggression, etc. it is relevant to get a details about – onset, course, frequency, when does the behaviors occur, how long does the behavior last, precipitating and ameliorating factors. These details add to the conceptualization/significance of the discrete

behavior; they may also be insightful for the parents and of course helping in planning the intervention.

Table 1: Symptom dimensions in child psychiatry

	Developmental disorders	Mood/ Anxiety symptoms	Disruptive behavior disorders	Learning disabilities
Young children	• Cannot sit/walk even in the 2nd year of life • Cannot speak like children his age • Does not make eye contact • Does not respond to name call • Does not play with children his age • Keeps day-dreaming • Does not complete any activity he starts • Is usually restless and fidgety • Does not sit in the seat in class, wants to repeatedly go out to the toilet or elsewhere	• Very cranky, irritable when sent to school • Becomes quiet, tries to hide in front of outsiders • Refusal to eat or go to sleep	• Does not obey commands • Answers back to elders • Teases, troubles other children • Is demanding • Frequently starts fights and is aggressive • Frequent complaints from school about classroom behavior	• Cannot identify alphabets correctly • Confuses alphabets • Avoids writing
Older children/ adolescents	• Cannot make friends • Lags behind in studies • Gets bullied by other children • Poor academic performance	• Is very shy • Feels scared to talk to teachers, outsiders • Does not answer in class • Irritability • Self-harm behaviors • Stays aloof	• Is very argumentative • Lies, steals • Troubles, bullies other children in class • Hurts animals • Is demanding and very often becomes aggressive when demands are not met • Drug use	• Makes a lot of 'silly mistakes' • Spelling mistakes • Learns everything orally but cannot write

In elucidating details about behavioral problems and how they have developed over time, the parents should be asked what is their understanding about the child's difficulties. So, one may ask the parent, *"What do you feel has led to the child's behavioral problems? OR Why do you think these behavioral changes have occurred in the child?"* Changes in school, peer group, the family environment, a parent going away for work, a sibling moving out of the house, etc may be significant factors that the parent is able to link the onset of the child's problems to. Processing and accepting any kind of change in their lives can be a complex task for children. Unpredictable interruptions in the formation of a coherent working model of the world around them can result in confusion, insecurity, and further unpredictability. This is why bereavement and grief is a most challenging experience for children. Children's evolving concepts of life and death interact with the personal loss; behavioral manifestations may range from complete indifference to events around them to extreme agitation and distress. Children with autism spectrum disorders, and other developmental conditions, are especially sensitive to any changes in their environment; they may present with general distress, sleep and food irregularities, irritability, aggression and even developmental regression. The key here, and in other contexts of 'change' is to understand the child's reactions and help them make sense of the situation keeping in mind the developmental perspective.

Concerns and symptoms picked up by parents must also be assessed for their impact on different functional domains in the child's life - at home, at school, with peers, etc. A useful tool in understanding functioning is to ask the parents and child to describe a 'typical day' – *"What all activities, and at what times of the day, the child does from waking up to going to bed?", "Who accompanies/supervises the child in which activities?".* Changes in the daily schedule after the onset of the current concerns should also be enquired. In development disorders, especially, *understimulation* can be quite prominent. The parents/caregivers may not have sufficient understanding about the transactional nature of child development. The child's daily activities may be largely comprised of solitary play with general overseeing by the caregiver/parent, with little one-to-one engagement and stimulation. Asking about the typical day helps elucidate the possibility of understimulation well.

When children have developmental disabilities/severe mental illnesses, the clinician could also check with the family if they have as yet sought any disability benefits. In addition to being an important part of the management plan, this enquiry also serves to enlighten the parents on available support systems for disability in the country.

A note on 'mobile use' and 'gaming' - Epiphenomena as presenting complaints?
In the recent past children being brought for excessive use of mobile phones, and excessive time spent on internet/ online games/ video games is increasing. The common perception among parents is that the child has become 'addicted' to the mobile phone or gaming, etc. Since the parents are more commonly able to report an approximate 'onset', course and duration of, say, the excessive mobile use, the underlying pathology may be missed. Children/adolescents presenting with these concerns must be evaluated for the whole range of child mental health issues. Learning issues, developmental deficits, mood/anxiety states may all lead to this behavioral phenotype either as an escape from 'difficulties' or as a manifestation of 'novelty seeking'. A primary diagnosis of behavioral addiction rarely holds once other mental health conditions have been evaluated for.

Children in special circumstances
Of late, children and adolescents are being increasingly referred for evaluation, to psychiatrists and psychologists, from state run institutions and agencies, non-governmental agencies. These children may be in difficult circumstances such as in conflict with the law or in need of care and protection including abuse or neglect. While forensic evaluations for these children are beyond the scope of this chapter, some pointers are discussed here.

- During the evaluation for children in state or non-governmental agency run institutions it is important to ascertain the reason for referral and ask for a written referral as far as possible. The case-worker's or probation officer's notes are vital to understanding the child and must be asked for if it is not already made available to the clinician.
- Documentation is vital when children are referred from institutions or the court and notes must be pristinely maintained by all parties involved in the care of the child.
- The clinician must liaise with all the other people involved in the care of the child and must integrate the information obtained to the extent possible.
- Even if children are referred by the state, every effort must be made to contact the parents of the child, both to obtain history as well as to communicate the plan of management and offer therapeutic help if required.

- The purpose of the assessment must be expressly discussed with the child/adolescent especially with respect to confidentiality and the limits of the same.
- As far as possible, multiple interviews, opportunities to observe and interact with the child is required before any report is made available, if asked for specifically by the referring agency.
- Given that the child has come from difficult circumstances, psychosocial adversities that they may have experienced or are currently experiencing such as abuse and neglect must be specifically enquired for in all children and adolescents. If the child comes from an institution then the care provided at the institution must also be an area of enquiry including risk of exploitation and abuse.
- The plan of management including follow up must be conveyed to the child and the caretakers and documented.

Use of structured assessment tools in child and adolescent psychiatry

Clinical judgement plays a pivotal role in the diagnosis and management of children and adolescents. Careful clinical interviews of multiple informants is usually the best method to aid in clinical decision making. Structured assessment instruments and observation methods can sometimes contribute to the process of this clinical decision-making. Two key uses of structured instruments are for a) diagnostic interviewing, and b) gathering descriptive information about various aspects of emotional, behavioral and social problems. The latter utility essentially means use of rating scales for quantifying symptom severity. Structured tools are also standard practice in the area of research where inter-rater reliability is important. Structured instruments can be categorized based on the domain of symptoms/assessment, and on the administration characteristics of the tool. Table 2 illustrates this. The reader will note that the majority of tools are structured, in that the behaviors or items to be assessed are specified and are to be rated in a specific manner. The interviewer must be sufficiently familiar with the tool in order to correlatethe behavior described/observed to the items on a tool. The use of screening tools, structured diagnostic interviews or scales for particular disorders must be used based on the purpose of the assessment. For instance, if a child is diagnosed to have Obsessive Compulsive Disorder (OCD), the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS) may be used to assess the severity of the condition or response to treatment etc. In the same child an anxiety or depression screening tool may be used to ascertain for anxiety and depression, apart from the clinical interview, in order to rule out the above-mentioned conditions as they are highly comorbid with OCD and not easily discernible in this population. Thus, the use of these measures must be done with careful thought regarding the need that the particular measure is going to serve. No measure is a replacement for a good history, examination and sound clinical judgement. While choosing these instruments it is also important to consider the psychometric properties as well as other practical considerations including the impact of culture. Another challenge inusing these measures is thatit may interfere with the rapport that the clinician is trying to develop with the child. The timing, need and explanation regarding these measures, provided to the child and family, is vital in getting appropriate and useful information from them. However, and this cannot be reiterated enough, that no measure can be a replacement for a comprehensive clinical evaluation and clinical expertise. Given below is a table of most frequently used scales and diagnostic interviews which can be made part of aclinical assessment. Scales for individual disorders are beyond the scope of this chapter.

Table 2: Structured assessment tools in child and adolescent psychiatry

Assessment	Name of tool& source	Format	Rater	Remarks
Diagnostic interviews	**Diagnostic Interview Schedule for Children (DISC)** *(https://www.cdc.gov/nchs/data/nhanes/limited_access/interviewer_manual.pdf)*	Highly structured	Respondent	ICD/DSM diagnosis
	Kiddie-Schedule for Affective Disorders and Schizophrenia (K-SADS) *(https://www.kennedykrieger.org/sites/default/files/community_files/ksads-dsm-5-screener.pdf)*	Semi-structured	Interviewer	ICD/DSM diagnosis
	Mini International Neuropsychiatric Interview for Children and Adolescents (MINI-KID) *(https://eprovide.mapi-trust.org/instruments/mini-international-neuropsychiatric-interview-for-children-and-adolescents)*	Semi-structured	Interviewer	ICD-DSM diagnosis
	Child and Adolescent Psychiatric Assessment (CAPA) *(http://devepi.duhs.duke.edu/capa.html)*	Semi-structured	Interviewer	DSM diagnosis
	Preschool Age Psychiatric Assessment (PAPA) *(http://devepi.duhs.duke.edu/eMeasures/PAPA%20(for%20review%20only).pdf)*	Semi-structured	Interviewer	DSM diagnosis
	Development and Well Being Assessment (DAWBA) *(http://dawba.info)*	Structured	Respondent	DSM diagnosis
Symptom assessment	**Strength and Difficulties Questionnaire (SDQ)** *(http://www.sdqinfo.com)*	Structured	Respondent	Behaviour scores
	Achenbach System of Empirically Based Assessment (ASEBA) *(http://www.aseba.org)*	Structured	Respondent/ Interviewer	Behaviour scores &DSM diagnoses
	Behavioural Assessment System for Children (BASC-2) *(https://www.pearsonclinical.com/education/landing/basc-3.html)*	Structured	Respondent	Behaviour scores
	Pediatric Symptom Checklist (PSC) *(https://www.brightfutures.org/mentalhealth/pdf/professionals/ped_sympton_chklst.pdf)*	Structured	Respondent	Behaviour screening
	Child Symptom Inventories –4(CSI-4) *(https://www.porticonetwork.ca/web/knowledgex-archive/amh-specialists/screening-for-cd-in-youth/mental-health-disorders/csi4)*	Structured	Respondent	Behaviour screening
Functioning	**Children's Global Assessment Scale**	Semi-	Interviewer	Global

assessment	**(CGAS)** *(https://www.corc.uk.net/outcome-experience-measures/childrens-global-assessment-scale/)*	structured		functioning
	Child and Adolescent Functional Assessment Scale (CAFAS) *(http://www2.fasoutcomes.com/Content.aspx?ContentID=12)*	Semi-structured	Interviewer	Multi-domain functioning and risk assessment
	Columbia Impairment Scale (CIS) *(https://www.hrcec.org/images/PDF/CIS-Y.pdf)*	Structured	Respondent	Multi-domain functioning
	Brief Impairment Scale (BIS) *(http://www.heardalliance.org/wp-content/uploads/2011/04/Brief-Impairment-Scale-English.pdf)*	Structured	Interviewer	Multi-domain functioning
	Vineland Adaptive Behaviour Scales – II (VABS-II) *(https://www.pearsonclinical.com/psychology/products/100000668/vineland-adaptive-behavior-scales-second-edition-vineland-ii-vineland-ii.html)*	Structured	Respondent	Multi-domain functioning
	Developmental Disability – Children's Global Assessment Scale (DD-CGAS) *(https://psychmed.osu.edu/wp.../DD-CGAS-for-Children-with-PDDs_03-02-2007.doc)*	Semi-structured	Interviewer	Multi-domain functioning
Observational measures	**Dyadic Parent Child Interaction Coding System(DPICS)** *(http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.627.4254&rep=rep1&type=pdf)*	Structured	Interviewer	Parent-child interaction
	Autism Diagnostic Observation Schedule – 2 (ADOS–2) *(https://www.wpspublish.com/store/p/2647/ados-autism-diagnostic-observation-schedule)*	Structured	Interviewer	Symptoms of autism spectrum disorder
	Direct Observation Form (DOF) *(http://www.aseba.org/dof.html)*	Unstructured	Interviewer	Behavioural ratings
	Disruptive Behaviour Diagnostic Observation Schedule (DB-DOS) *(https://www.kenniscentrum-kjp.nl/wp-content/uploads/2018/04/Disruptive-Behavior-Diagnostic-Observation-Schedule-DB-DOS.pdf)*	Structured	Respondent/ Interviewer	Disruptive behaviour
	Coding Interactive Behaviour (CIB) *(www.thecodingconsortium.com/cib.html)*	Semi-structured	Interviewer	Parent-child interaction, socio-emotional risk

D. Medical history& Physical examination

Child and adolescent psychiatry straddles both psychiatry and pediatric medicine including neurology and thus a clinician needs to take a detailed medical history, conduct an appropriate physical examination including laboratory investigations in order to support or refute the provisional diagnosis from a biopsychosocial perspective.[5] For example, a child may be inattentive in school and may hail from a family where they have limited resources and thus the physical examination must look for signs of anemia and a serum hemoglobin and hematocrit must be obtained to rule out anemia as a contributing factor toward the inattention. In a country like India, for many children/adolescents contact with a psychiatrist, in the context of behavioral concerns, may be their first ever medical contact. Therefore, getting a good medical history/examination is vital from the global health of the child perspective. Medical health, of course, has a huge bearing on developmental and behavioral presentations and management. The medical history must include a dietary history and the exercise and activity level of the child for the diagnosis in conditions such as eating disorders, depression as well as for maintenance management in conditions such as ADHD or psychosis where psychotropic medications are being used in treatment. If a child presents with psychological issues as part of a chronic medical condition such as juvenile onset diabetes or HIV, then the psychiatrist must be part of the multidisciplinary team involved in the care of the child and must be privy to the medical history and investigations of the child. A history of recurrent falls or fractures/injuries, secondary enuresis or encopresis must alert the clinician to the possibility of abuse.

Family medical and psychiatric history is also of vital importance during evaluation and treatment planning. Developmental disorders may be part of genetic syndromes, which may be associated with a unique family history profile. The clinician may find consanguineous parentage, other first/second degree relatives with developmental delays or dysmorphic features or neurological or psychiatric conditions. Further, family history can impact treatment decisions.A family history of young onset cardiac illness or sudden death in young family members is especially relevant for those children with ADHD in whom stimulant drugs are being considered.[6]In such children, a detailed history related to cardiac symptoms such as dyspnoea, palpitations, fainting spells brought on by exercise needs to be obtained apart from a referral to a paediatrician for a more detailed cardiac assessment. A family history of diabetes mellitus, hypothyroidism or neurological disorders are relevant from a risk perspective especially when psychotropics are being considered for the management of a particular disorder. A family history of depression, anxiety, psychosis or even ADHD are important not just from the perspective of increased genetic risk for that particular child but also from the psychological and social perspective given that parenting and caregiving play such an important role in the overall development of the child.

Physical examination

Box 3: General principles of Physical examination in a child/adolescent

Explain the reasons for the examination Explain, to both child and parent, what will be done during the examination Child and parent should give verbal permission for the examination The parent/caregiver must be present in the room during the examination

The physical examination must be guided by the presenting complaints, hypotheses and differential diagnosis that the clinician is considering based on the history obtained from the child and family. Typically, physical examination begins with the recording of the vitals including the height and weight and should be plotted on a growth chart. The head circumference must also be recorded on a growth chart. This will help keeping track of these vital parameters over time especially because they are an important measure of well being in children and adolescents. It is also crucial to measure height and weight in children who are on stimulants or SSRIs at every follow up. Calculating the child's Body Mass Index (BMI) and measuring waist circumference has also become important given the extent of use of atypical antipsychotic drugs. Vital parameters such as the pulse rate, blood pressure, respiratory rate and temperature must be recorded.

Box 4: Physical examination in psychiatric assessment of children & adolescents

Height, Weight, Body-Mass Index Head circumference Waist circumference Pulse rate, Blood pressure, Temperature, Respiratory rate Head-to-toe examination: Head, eyes, nose, mouth, ears, throat, skin, hair, nails Systemic examination: Cardiovascular, Respiratory, Per abdomen, Central nervous system

Examination of skin, hair, nails: In child and adolescent psychiatry, apart from the presence of systemic illnesses and neurocutaneous disorders, the clinician must also look for signs of intentional self-injury, abuse (scars, bruising, petechiae), abrasions, skin picking may be suggestive of compulsive behaviour or patterns of hair loss either on the scalp or other parts of the body may be suggestive of trichotillomania. Presence of acne must also be noted – may be due to adolescence itself or due to the use of Lithium or may be a sign of PCOD. As acne causes considerable distress in young people measures must be taken to help the adolescent with this particular skin ailment. Signs of neglect and poor self-care must be noted. Children and adolescents may be untidy, unkempt and/or may have lice or other parasitic infections.

Examination of the head, eyes, nose and throat: This examination must begin with the recording of the head circumference. Signs of dysmorphic facial features characteristic of specific genetic disorders such as Fragile X, Prader-Willi, Angelman, Williams or Turner's Syndrome apart from others must be noted. Examination of the teeth, gums, mouth is important to ascertain dental hygiene and signs of self-induced vomiting. If there are any concerns regarding vision or hearing then a referral for a detailed assessment with an ophthalmologist and/or an audiologist must be done.

Neurological examination: This is of utmost importance in psychiatry and must include an examination of the cranial nerves, sensory and motor systems, balance, coordination and reflexes. Mental status examinations must pay particular attention to changes in the emotional state and cognition. Asking the child to copy a geometrical figure or to draw something of their choice not only gives an insight into their fine motor functions but also of their cognition, attention, and emotional state.

Genital examination: A psychiatrist under most circumstances is not required to perform a genital examination. In certain genetic disorders such as Prader Willi Syndrome or

Klinefelter's Syndrome or other such conditions where an inspection of the genitalia is required for making a diagnosis, it can be done, with prior permission from the parent/guardian, in the presence of another health care provider and taking adequate care to keep the young person comfortable. Otherwise, referral toa Paediatrician for evaluation is a good way forward.

Laboratory Investigations

The laboratory investigations must be guided by the history and physical examination findings in agiven child. These aid in supporting or refuting the diagnosis or help in the management of the child. There is no standard battery of laboratory investigations for psychiatric disorders. Under ideal circumstances a child will have a Paediatrician involved in their regular care. If not, a referral to a Paediatrician may be necessary. All investigations must therefore be done in the context of the child's usual health care. The psychiatrist may do specific investigations pertaining to child's mental health condition. For example, if a child is on Lithium then serum Lithium level, renal function tests must be done. If there is an issue with the renal function tests, a referral must be sought with the Paediatrician as soon as possible. Similarly, an electrocardiogram (ECG) is sought at baseline prior to starting atypical antipsychotic agents such as quetiapine that could prolong the 'QT interval'. Subsequent measurements during dose increments may also be needed. While a routine ECG is not required while starting stimulant medication it may be required if the child has symptoms suggestive of a cardiac illness or a family history of cardiac illness. An electroencephalogram (EEG) is not routinely required in psychiatric disorders but maybe ordered if one suspects seizures or in high risk groups such as children with intellectual disability and autism spectrum disorders. Routine genetic evaluations must not be done. Presence of dysmorphic features and intellectual disability in a child may prompt a genetic evaluation, with the parents' express consent. Conditions such as early onset psychosis and autism spectrum disorders have a number of differential diagnoses based on possible aetiology and the laboratory investigations must reflect the possible aetiology. Laboratory investigations relevant to a particular disorder will be dealt with in guidelines pertaining to those clinical conditions.

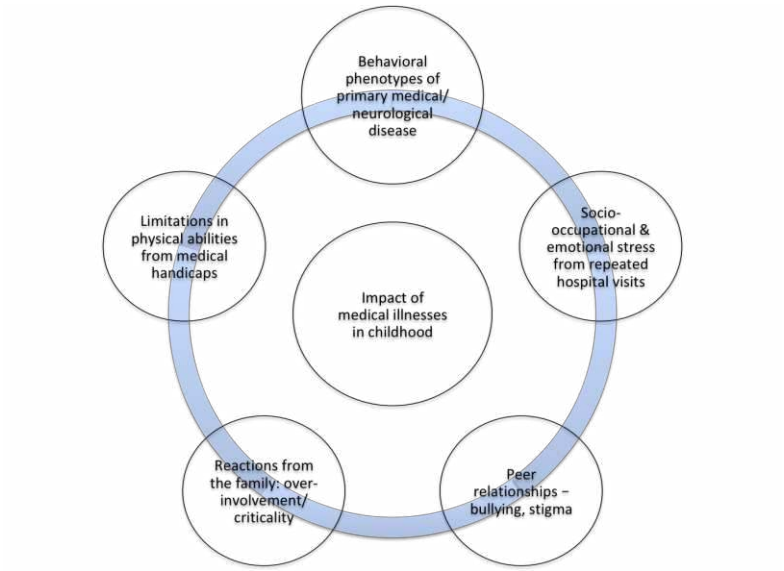
Box 5: Laboratory investigations in psychiatric assessment of children & adolescents

Complete blood count
Liver function tests: *prior to starting medication and in follow-up*
Renal function tests: *prior to starting medication and in follow-up*
Lead levels: *if there is suspicion of lead exposure*
Thyroid function test: *based on symptom profile, family history, use of lithium or in iodine deficiency endemic areas*
Blood chemistries: *fasting blood sugar, serum electrolytes*
Lipid profile: *if on atypical antipsychotic medication*
Sexually transmitted disease panel: *HIV, HbsAg; if there is suspicion of abuse, unprotected sexual activity*
Urine pregnancy test: *if there is history of abuse, unprotected sexual activity*
Drug screen: *if there is hisory of substance use, first episode psychosis*
Urine analysis
Screening for genetic disorders – Tandem mass spectrometry, urine screening for metabolic disorders
Neuroimaging – *history of neurological symptoms or suspicion of genetic syndrome with neurological involvement*

E. Past history

A past history of similar or other behavioral concerns, and history of medical issues must be asked for. It may not be easy to disentangle 'past episodes' in a child's clinical history as developmental, emotional, behavioral issues most often run a continuous course. In developmental disorders, therefore, there is no past history. The history must flow in a continuous manner from early developmental period. However, inacting out behaviorand in severe mental illnesses such as bipolar disorder and psychosis, episodic exacerbations can be made out. Functioning of the child in the intervening period must be explored in different contexts - interaction with parents and significant others, self-care, academic performance, relationship with peers, and pursuance of hobbies and interests outside of academics. One must also look for factors contributing to relapse - drug discontinuation, familial/social stressors, any changes in the child's living or educational setting. Medical illnesses can have multi-pronged effects on clinical presentations (Figure 3). These can broadly be understood as direct effects emerging as behavioral manifestations of medical/neurological illnesses, and indirect effects resulting from the socio-emotional, occupational and functional consequences of the illness.

Figure 5: The impact of medical illnesses in childhood



F. Pregnancy, perinatal, early developmental history

Several associations are seen between pregnancy, maternal health, early exposure related variables and developmental and behavioral outcomes during childhood and adulthood. At the clinical assessment level, it may not be possible to always conclude causal influences, however, the knowledge of these variables can guide further evaluations, shed light on psychosocial circumstances of the family, help the parents and clinician gain some perspective on the 'global risk' in a child. Systematic questionnaires such as the Pregnancy History Instrument – revised (PHI-R)[7] could be used for a comprehensive coverage of various pregnancy related and early developmental stressors. During clinical evaluation, at least the areas covered in the table below could be screened.

Table 3: Pregnancy, perinatal and early developmental history

Historical domain	Example questions
Preconception	*"Was this a planned pregnancy?"* *"Were you (parents) prepared for the child?"* *"Did you (mother) have any health problems before your pregnancy? What was their status around the time you conceived?"*
Pregnancy	For each trimester of pregnancy, the following questions can be asked" *"How was your health during the first/second/last 3 months of your pregnancy?"* *"Did you have to undergo any procedures or treatments during this time?"* *"How were you keeping psychologically and emotionally?"* *"Was there enough support available to you from family?"* *"Did you use any medications during this time?"* *"Did you use any drugs (alcohol, tobacco, others)?"* *"Did you meet with any accidents?"*
Delivery	*"How long were you in labor?"* *"Were there any complications?"*
Post-natal period	*"How long after birth did the baby cry?"* *"Did the doctors say there were any problems in the baby?"* *"Did the baby require any medical care after birth? How many days after the baby's birth did you return home?"*
Neonatal period	*"How was your (mother) health and psychological well-being during the first month?"* *"Did the baby suffer from any medical problems?"* *"Were there any 'difficulties' in looking after the baby during this time – baby too irritable, sleeping difficulties, little help for the mother?"*

G. Developmental history

The developmental history of a child, across different domains gives the 'background' on which to understand the current behavioral concerns and to plan pharmacological and psychotherapeutic management. For instance, a child with a developmental history of social and language delay, presenting with peer relationship issues and bullying in school, most probably has social skill deficits arising from autism spectrum disorder. Another child with declining academic performance with increasing school level, on exploration may have developmental delay in multiple domains, and the intellectual disability may be responsible for the academic difficulties. A developmental profile of the child requires information on a) age at acquisition of various milestones and b) the current developmental level. Under-stimulation and malnutrition could present with a picture of early developmental delay, followed by rapid catch-up growth and development with the correction of environmental and nutritional factors. Similarly, while assessing development in a child, environmental stimulation and physical growth must be assessed alongside developmental milestones. Children with developmental problems are also most sensitive to environmental and general health factors, i.e. a child with a developmental delay is more likely to show developmental regression in the context of a medical illness or parental absence due to illness, than a child who was developing normally. A detailed coverage of developmental milestones and elicitation techniques is outside the scope of these CPG. The clinician is referred to key resources[8], and webpages (https://www.cdc.gov/ncbddd/actearly/pdf/parents_pdfs/milestonemomentseng508.pdf, http://ctsmed.blogspot.com/2012/09/how-to-learn-understand-and-memorize.html) for further information.

The developmental assessment must also proceed with attention to parental and child sensitivities. Parents are usually aware of even mild delays in their child's development, and there is a tendency to self-blame. In fact, some parents have a eureka moment when, say, the clinician points out how excessive screen time and insufficient contact with same age peers is playing a role in the child's speech and social delay. Some questions to elicit information on different aspects of child development[9]are given below (Table 4).

Table 4: Questions to elicit information on developmental domains

Developmental domain	Example questions
Psychomotor	*"When did the child start walking?"* *"What sports/activities does the child do? Which ones have gone well? Which ones not so well?"*
Cognitive	*"Did the child show interest in things you pointed to? Did the child point out things to you?"* *"At what age did the child begin play school/nursery? Were there any problems?"* *"How does the child do in reading?... In arithmetic?... With writing?"* *"Has the child had any difficulties in any specific subject?"* *"Has the child ever failed in school?"* *"Has the child ever been suspended from school, or has ever refused to go to school?"*
Social/ Interpersonal	*"How did the child relate to you?"* *"How did the child respond to your directions?"* *"When did the child start to show interest in other children? How did that go?"* *"What kind of friends does the child have now?"* *"How does the child get along with his friends?"*
Emotional	*"Does the child recognize when he/she is feeling sad, ..anxious, ..angry?* *"How does the child soothe himself/herself when in a bad mood or anxious?"* *"What is the child's most common mood state?"* *"How does the child respond to unexpected changes? Disappointments? Frustrations?"*
Moral	*"Does the child recognize right from wrong?"* *"How does the child react when confronted with mistakes or doing something wrong?"* *"Has the child deliberately hurt other people? Animals? Property?"* *"Does the child consider consequences of his/her decisions on others?"* *"Does the child show remorse after hurting others?"* *"Is the child too perfectionistic or morally rigid?"*

H. Temperamental history

In addition to developmental milestones, the temperamental characteristics of a child have to be elicited. Temperament refers to patterns of emotional and behavioral reactivity to environmental situations and capacity for self-regulation.[10] It is essentially a combination of social and emotional developmental profiles of the child. Temperamental traits described by Thomas and Chess[11] are useful to generate a comprehensive picture of a child's temperament. Table 5 below gives the temperamental traits with questions on how to elicit them. The parents may have to be reminded during interview to give information on the child's behavioral tendencies prior to the occurrence of current behavioral concerns. Parents information on different temperamental traits in a child should be corroborated with examples of the child's behavior in different circumstances. This is important as sometimes parents judge a child's behavior based on their own personality characteristics, . Parents who are passive and calm themselves may over-report minimal 'normative' changes in the child's activity, e.g. a child irritable over the first few days of starting school, or a child quickly moving from one toy to the next at a friend's place before settling upon one. This 'goodness of fit'[12] or the absence of it can have major influence on the parents report.

Table 5: Questions to elicit temperamental traits in a child

Temperamental trait	Example questions
Activity levels	*"How active/energetic is the child generally?"* *"Are there periods when the child can sit still, or is there constant movement? Fidgetiness?"* *"What kind of games does a child prefer? Calm and quiet? Or noisy and energetic?"*
Rhythmicity	*"Does the child eat/sleep regularly?"* *"Are the sleeping and feeding patterns predictable?"*
Distractibility	*"is the child able to concentrate on the activity he or she is doing?"* *"Is the child easily distracted by, say, someone coming into the room or some noise outside the room?"*
Approach/withdrawal	*"How does the child respond to new situations? People? Places? Things?"* *"Does the child show interest in new situations? People? Places? Things?"*
Adaptability	*"Does the child adjust to changes in his/her environment?"* *"Does the child become upset if something in his/her environment changes?"*
Attention span and persistence	*"Does the child complete activities he/she starts?"* *"Does the child get easily frustrated if he/she faces some difficulties in a task?"*
Intensity of reaction	*"Does the child show intense reactions, when he/she likes something? Is happy about something? Or is upset by something?" OR "Is the child calm and not very emotional in his/her reactions to pleasant/ unpleasant situations?"*
Responsiveness threshold	*"Is the child sensitive to sounds, tastes, smells, touch?"* *"Does the child react to even minor changes in his/her surroundings?"* *"Are even minor changes in his/her surroundings bothersome?"*
Mood	*"How is the child's mood most of the time?"* *"Is he/she generally cheerful, pleasant, friendly? Or is he/she generally cranky and prone to crying?"*

I. Schooling history

The school is the primary occupational arena for children and adolescents. It is where the elaboration of developmental abilities, especially cognitive, socio-emotional abilities, occurs. Information about school should be collected from the child, parents and teachers at school. There is a large amount of information that could be collected about the schooling experience of the child. Some important areas include – the age at starting school, initial adjustment challenges, learning in academic skills, peer group interactions, participation in extra-curricular activities, absenteeism, change of school (if ever). Details about the school per se are also important in order to completely understand the adjustment between the child and the school. Such details could include – the academic board the school is affiliated to, if the school follows any particular education philosophy (e.g. waldorf education system), teacher-student ratio, faciities for co-curricular and extra-curricular activities, distance of the school from child's home.A lot of children and adolescents attend tuitions post school hours. The duration, and nature of these tuitions should also be explored, in addition to the reasons for these extra tuitions, and the child's inclination for them.

J. Child's interests, skills and talents

The child and the parents must be asked about the skills, and interests of the child. Here, too, it is important to frame the questions correctly to get the correct responses.

Box 6: Questions to explore child's interests, skills and talents

"What makes the child happy?"
"What activities does the child enjoy?"
"What are the activities the child is good at?"
"What does the child express curiosity in?"

Enquiring about the child's interests, skills and talents, can be an ice-breaker or a communication starter with the child. It makes the child aware that the interviewer sees the child as a 'person' and not just a problem. The clinician must make a conscious effort to separate the illness from the personhood of the child.

K.Family history

Family history is a vital component in the detailed assessment of a child/adolescent. The occurrence, manifestation, and exacerbations of all kinds of mental health issues are affected by the medical/psychiatric history in the family and the relational dynamics. Enquiry into various aspects of the family history has to be sensitively carried forward as parents may not always readily appreciate the need for details on this front. They may even be defensive, or non-disclosive. An adequate understanding about the family factors may only happen over a period of time. Parents need to become comfortable talking about themselves, and sharing details about other members in the family. Some questions leading into exploration about various aspects of the family are presented in Table 6. Responses to these questions can be further supplemented by clarifications.

The presence of psychiatric and/or medical illnesses in the family can impact the child in several ways.[13] Factors that may directly impact the child include - genetic endowment, early life exposures including intrauterine environment, postnatal exposure to parental mental illness and the physical/emotional unavailability of the parent. Factors that may indirectly play a role include socioeconomic disadvantages and parental conflict associated with mental illness. Enquiry about mental illnesses in the family may have to be done separately with each parent, and out of hearing of the child as well as they may not have discussed this with each other at all.At times the parents themselves may not reveal the fact that they are suffering from mental illness. Parental mental illness affects attachment dynamics, the cognitive, emotional, social and behavioral development of children and puts the offspring at risk of developing a mental illness in childhood, adolescence and later in adult life. It follows that more than just the mere presence of a mentally/medically ill parent, or significant family member, it is important to understand what this has meant for the child(ren) in the family. Children as young as infants and preschoolers are able to 'catch' the emotional environment of the house and may respond with a variety of behavioral, emotional changes - irritability, feeding and sleeping irregularities. The parent-child relationship and the child's relationship with significant others in the family give further insights into how various behavioral patterns may have established over a period of time. These relationships are determined by the parent's/family member's own personality traits and the relational dynamics within the family. These becomes particularly relevant in the context of internalizing and externalizing disorders. Vulnerabilities to anxiety disorders are perpetuated where there is a combination of temperamental anxiety, behavioral inhibition, and an anxious, over-cautious parent. Disruptive behavior problems worsen with both over-authoritative, and over-permissive parenting, where limits and boundaries are unclear. The 'goodness of fit' model[12] is pertinent here - "...*it is the nature of the interaction between the temperament and the individual's other characteristics with specific features of the environment which provides the basic dynamic influence for the process of development…".*[11]

Table 6: Questions to elucidate family factors in child mental health

Family history of psychiatric illnesses
• "Have you (parents) ever suffered from any mental health problems?"
• "Has anyone in your immediate or extended family ever suffered from any mental health problems?"
• "Do you recall anyone in your immediate or extended family having had drug use, or a prolonged change in behavior?"
• "Do you recall anyone in your immediate or extended family ever having attempted suicide?"
• "Does the child know about/ Has the child witnessed these illnesses?" How did he/she respond to it?"
Family history of medical illness
• "Have you (parents) had any long-standing medical problems?"
• "Has anyone in your immediate or extended family ever suffered from any long-standing medical problems?"
• "Does the child know about/ Has the child witnessed these illnesses?" How did he/she respond to it?"
Parental relationships
• "How would you describe your (parents) relationship?"
• "Have there been any periods of discord/disharmony in your relationship?"
Parent-child relationship
• "How is your (parent) relationship with your child?"
• "Does the child share his/her experiences with you?"
• "Do you (parents) agree on how to respond to the child?"
• "Is there anything that you (parents) do quite differently from each other?"
• "Did you (parents) grow up in similar type of families?"
Relationship with significant others in the family
• "Did you (parents) grow up in similar type of families?"
• "Do others take an active part in the day to day life of the child?"
• "What kind of relationships does the child have with others in the family?"

Part IV: Past evaluation and interventions

Details about past assessments, evaluations, treatments, response to the treatment, and side effects must be collected. This would, obviously inform future direction of evaluation and management.

Part V: Examination

Part V.a: Interview of Children and Adolescents

History and examination in child and adolescent assessments are not watertight compartments. Observation of the child/adolescent has to start soon as he/she first meets the clinician. Mental states in children and adolescents mayhave a higher intensity and frequency variation than adults. For instance, mood disorders in young people have preserved reactivity such that a depressed child may appear reasonably excited when given a toy to play with during examination. Serial examinations are more useful in getting a true picture about the mental state characteristics. Children and adolescents may also not be ready to immediately share their experiences, feelings and thoughts. This may happen because of unfamiliarity and intimidation by the clinical setting, or a developmental unreadiness.The clinician must not presume anything about the capacity of children to give information/participate in an interview. Children as young as 2-3 years old can answer simple questions about what they like, who they like, what makes them angry, etc. The clinician must make it a point address the child and ASK questions in an age appropriate language. Thus, important things to keep in mind during mental state examinations of children and adolescents are:

a) Observations have to be made throughout the interaction with the family
b) Serial examinations help uncover psychopathology

c) Developmentally appropriate techniques must be used
d) Behavioral observation may be more informative that thought/perceptual content

Use of developmentally appropriate techniques

a. Young children

Expressive channels in children evolve from play in very young children, to art and other creative ways, and finally to verbal dialogue close toadolescence. The manner of exploration and engagement with children must follow this understanding. Therefore, waiting for preschool children to cooperate across an interview table may not be successful, whereas letting the child sift through toys, or be in a play area may reveal his activity levels, attention span, ability to tolerate frustration, and cognitive abilities. Use of colors, pens, paper, puzzles, peg boards, can all be used in the office to facilitate interaction with young children. Direct questions to a child should be short, precise, in simple words, dealing with one concrete issues at a time. For example, if a child is being bullied at school, asking him/her *"Does anyone trouble at school?" would be better than asking, "Can you tell me about any problems you are facing at school?"* Children are able to relate to, and identify with cartoon characters and animals better than they are able to talk about their own feelings and behaviors. Talking to them using these 'familiar' themes may facilitate disclosure about their emotions, and experiences.Children may be intimidated by the clinical setting, and not be comfortable with questions being posed to them directly. Use of paper and line diagrams, with both the clinician and the child looking at the paper and talking may be better than direct eye to eye contact.

b. Adolescents

The development of formal operational thinking in adolescents puts them in a position to be able to not only report their experiences, but also draw interpretations and hypotheses. It is important to interview the adolescent alone, since a developing self-awareness and self-consciousness may make them feel inhibited in front of family. Adolescents are also very concerned about not being believed, or being considered weak or different. They often put a lot of time and energy into 'normalizing' their experiences, or denying them. The clinician must therefore make all attempts to make the adolescent feel comfortable and acknowledge their subjectivities.Confidentiality can be a big issue, especially where, say, substance use or sexuality is concerned. The clinician must avoid false promises of confidentiality just to get the adolescent to open up. Adolescents appreciate logical arguments and find comfort in predictability. It is, therefore, advisable for the clinician to be honest about the limits of confidentiality.

Table 7; Components of the Mental State Examination

MSE component	**Observable features/ Phenomenon**
Physical appearance	Approximate age Grooming Dysmorphic features Abnormal movements – tics, mannerisms, stereotypies, hyperactivity
Manner of relating to others	Eye contact, facial expressions, non-verbal gestures Cooperation and engagement with examination Overt behaviors – aggression, clinginess
Mood	Type of mood – irritable, cheerful, sad Variations in mood in relation to topics discussed

	Range and reactivity – response to various topics discussed, activities carried out
Speech	Tone, tempo, prosody, volume Relevance to the context and coherence Language skills especially complexity of language Fluency
Psychomotor activity	Activity levels Coordination
Thinking	Form of thought Content of thought – Fears, Phobias, Delusions, Overvalued ideas, Depressive cognitions, suicidal ideas, ideas about self-harm, Preoccupations with risk-taking behavior Possession of thought – obsessions & compulsions
Perception	Hallucinations Illusions *Young children's psychopathological experiences may have to be differentiated from fantasy and imaginary friends*
Overall cognitive functioning	Vocabulary Fund of knowledge – about games child likes, hobbies, daily routines, school Drawings – content, object specific colors
Orientation	Time, place and person *Young children may be able to give only few details: time – morning/afternoon/evening, place – hospital/home/school, and person – parent/doctor*
Attention and concentration	Persistence with a task Tendency to get bored easily
Memory	Short-term – Recall of last meal, recent school activities, recent celebrations at home Long-term – Own birthday, family trips, vacation outings
Judgment	Ability to judge hypothetical situations
Insight	Acknowledgment of behavioral/emotional/psychological problems Attitude towards and engagement with treatment *The 'content' of insight is highly determined by the age of the child, and may change/develop over time, e.g in very young children the child may only know that he or she gets angry and that needs to come down, whereas adolescents may recognize the anger, what triggers it, and how the anger is problematic.*

Part V.b: Examination of Infants and Toddlers

Assessment of infants is especially challenging as the clinician has no direct linguistic access to the problems concerned. The assessment must rely on a three pronged approach – a) parent interview, b) infant/toddler observation and c) parent-child interaction.[14]

a) Parent interview:

Given the proximity to and the evidence for influence of birth and neonatal events on infant growth and development, the parents'/caregivers'must be asked to give an account of events starting from pregnancy, delivery and subsequent developmental details, comprehensively. In addition, the psychological and emotional relationship of the infant with

parents and other family members needs to be understood –*Was the pregnancy planned? What were the parents' expectations? How the infant fits into the family? What does the infant mean to each family member? What do caregivers like about the infant? What is a typical day like in the life of the infant?* Parents/caregivers may be overwhelmed with fears and guilt about being responsible for the infant's problems. They may be scared of finding out that the infant is "damaged" or "defective". Given these emotional overtones, the historical account may not be clear and coherent in the very first interaction. Parents may need reassurance about the multi-factorial influences on child development so that they may feel confident enought to share more information.

b) Infant and toddler observation:
Observing infants and toddlers can uncover a range of behavioral and developmental facets. Using play techniques, especially with toddlers, can clarifycognitive, linguistic, social and motor developmental achievements. The child has to be in a calm, alert state for best estimation of cognitive and socio-emotional development. Therefore, if the child is irritable, from hunger or some physical discomfort, the parents may be asked to attend to the imemdiate needs of the child and then resume assessment process.

The *physical health status* of the child could give important clues to possibility of underlying medical conditions as also under-stimulation and parent-child attachment. Height/length, weight, state of skin and hair and the activity levels – curiosity, interest in the environment – can be easily observed during the first few minutes of the assessment.

Sensory abilities – vision, hearing – mature rapidly during the first year of life. Upto 2-3 months of age, infants are long-sighted and can see clearly at about 12 inches away, thereafter visual accommodation matures and the infant is able to track near and far objects, and respond to parents' faces. In a quiet, alert state even neonates can turn their head to sound. The clinician should note if the child appears sensitive to sounds and visual stimulation. Some children with premature birth, and developmental disorders could have very low or very high sensory thresholds. Sensory stimulation may need to be accordingly adjusted to effectively engage the child.

Domains of growth and development that can be easily observed during a consultation are given in Table 8 below. The child can be made to do these activities with help and encouragement from the parents. Variations in these activities could be due to developmental delays. Temperamental differences may affect how easy/difficult it is to engage the child. Thus, a single assessment may not give an indication of the child's 'best' abilities. A combination of historical information from the parents and a series of observations are more informative.

Table 8: Observation of infants/toddlers

Age	Infant	1 year	2 years	3 years
Fine motor	*Grasping* *Bidextrous grasp: 3 months* *Monodextrous grasp: 6 months* *Pincer grasp: 9 months*		*Use spoon, pencil* *Copy vertical line*	*Copy circle, cross*
Gross motor	*Transfer objects: 6 months* *Sitting: 6 months* *Standing: before 1st birthday*	*Walking*	*Climb stairs* *Run*	*Stand on one foot*
Cognitive	*Finds an object after watching it hidden: 9 months*	*Recovers hidden object through trial and error*	*Understands sequence of activities – put doll to bed, cover it, then turn off light* *Matches shapes*	*Can understand numbers – 1 apple, 2 apples* *Can understand time of day*
Language	*Babbling: 4-5 months* *Understands "NO": 9 months*	*Picks up familiar objects when asked to* *Starts pointing to body parts between 1-2 years*	*Points to pictures, more body parts* *Makes 2-3 word sentences* *Can say "NO"*	*Can tell name, sex* *Uses "I", "You"* *Knows positions – under, on, in*
Play	*Same behavior with all objects – bangs, shakes, mouths* *Inspects objects, plays peek-a-boo: 9 months*	*Knows 'social' functions of objects – says 'hello' on phone, 'drinks' from toy cup*	*Plays in 'parallel' – building a tower, arranging objects in a line, without any interaction with others*	*Takes 'turns' at throwing a ball, turning pages of a book*

While attempting simple activities to observe above mentioned developmental abilities, the clinician could also gain an idea about the child's temperament. Questions to identify temperamental characteristics are mentioned in Box 7 below.

Box 7: Identifying temperamental characteristics of the infant/toddler

"How does the child cope with frustration, i.e. not being able to carry out an activity?"
"Does the child persist with the task despite failures?"
"What is the level of mental and physical engagement in an activity?"

c) Parent-child interaction

In toddlerhood, with their increasing motor and cognitive capacities, children are quite exploratory. It is during this time that attachment and parent-child responsivities can play a significant role in facilitating/hampering growth. Some simple observations during consultation are listed in Box 8 below.Children with developmental problems may not show these behaviors, and may stay engrossed in solitary activities.

Box 8: Observing parent-child interaction

"Does the child approach the parent for help or reassurance?"
"Does the child show his/her 'successes' to the parent?"
"Is the parent inrtusive and controlling, or comfortable and facilitatory?"

Part VI: Multidisciplinary referrals

Child and adolescent psychiatry necessitates evaluations and interventions from a multidisciplinary team most often consisting of a clinical psychologist, paediatrician, psychiatric social worker, speech and language pathologist, occupational therapist and other such health care professionals. The psychiatrist needs to make appropriate referrals to these professionals in order to understand to gain a holistic understanding of the child and family and plan interventions accordingly.

Part VII: Record keeping

Children, parents, families who come in for a psychiatric consultation are often loaded with historical details, and are distressed by the referral and evaluation process. It is understandably tedious for them to have to repeat information over consultations. Reviewing clinical notes from previous consultations puts the clinician in a clearer frame of mind in terms of future course of enquiry and future planning. It is good practice to have a recording format for recording history, examination and clinical discussion details. The Department of Child and Adolescent Psychiatry at the National Institute of Mental Health and Neurosciences, Bangalore, uses 'screening' and 'detailed work-up' proformas for the express purpose of recording each child's clinical history and notes. The screening proforma is used at first contact, and serves to identify the key areas of concern, and to identify broadly the provisional nature of problems - developmental, psychiatric, academic, parent-child conflict, etc. The information gathered can be fed back to the family so that they have an understanding about the future course of action - one child may need to be scheduled for an IQ test, another child may need to come in for a more elaborate consultation with additional members of the family, and so on. Evaluation in child and adolescent psychiatry is layered and complex. Clinical impressions may change from the first contact to the next. It is useful to go over in detail the clinical history at least a few times. The 'detailed work-up proforma' systematically records information on all aspects of a child's life. Very often as parents answer questions pertaining to these different domains they themselves get clarity on the multi-factorial contributors to the child's difficulties.

Conclusion

Child and adolescent mental health shares close links with other medical specialities such as neurology and paediatrics while being rooted in the child's psychosocial environment and experience. Therefore, any assessment of children and adolescents must evolve from a biopsychosocial perspective, taking into account these very different but inextricably interlinked aspects. Clinical history taking and interviewing are one of the most powerful tools available to the child and adolescent mental health professional to make a diagnosis and plan management and this clinical practice guideline can be used as an aid in that endeavour. Other measures such as rating scales, diagnostic interviews and laboratory investigations must be used in conjunction with the information obtained during history taking and interviewing. The clinician must be sensitive to the child's lived experience and culture as well as their developmental and cognitive capabilities. Clinical judgment and expertise is required to assimilate the information obtained from the child and other key informants.In child and adolescent mental health multidisciplinary inputs are required for almost every child and family and efforts must be made to link the different arms of evaluation and treatment such that there is convergence. Confidentiality and the limits thereof must be discussed with the child and family. Documentation is a very important aspect of assessment

and must be strictly maintained.A comprehensive clinical assessment will go a long way in ensuring the best possible treatment for the child and family.

References

1. Leckman JF, Taylor E. Clinical assessment and diagnostic formulation In: Thapar A, Pine DS, Leckman JF, Scott S, Snowling MJ, Taylor E, editors. Rutter's Child and Adolescent Psychiatry. 6th ed: Wiley Blackwell; 2015.
2. Drolet BC, White CL. Selective Paternalism. Virtual Mentor. 2012;14(7):582-8.
3. Kirby GH. The Psychiatric Clinic at Munich, with Notes on Some Clinical Psychological Methods. 1906.
4. Shevlin M, McElroy E, Murphy J. Homotypic and heterotypic psychopathological continuity: a child cohort study. Soc Psychiatry Psychiatr Epidemiol. 2017;52(9):1135–45.
5. Towbin KE. Physical examination and medical investigation. In: Thapar A, Pine DS, Leckman JF, Scott S, Snowling MJ, Taylor E, editors. Rutter's Child and Adolescent Psyhciatry. 6th ed: Wiley Blackwell. p. 449-62.
6. Hamilton R, Gray C, Belanger SA, Warren AE, Gow RM, Sanatani S, et al. Cardiac risk assessment before the use of stimulant medications in children and youth: A joint position statement by the Canadian Paediatric Society, the Canadian Cardiovascular Society and the Canadian Academy of Child and Adolescent Psychiatry. Journal of the Canadian Academy of Child and Adolescent Psychiatry = Journal de l'Academie canadienne de psychiatrie de l'enfant et de l'adolescent. 2009 Nov;18(4):349-55. PubMed PMID: 19881947. Pubmed Central PMCID: 2765391.
7. Buka SL, Goldstein JM, Seidman LJ, Tsuang MT. Maternal recall of pregnancy history: Accuracy and bias in schizophrenia research. . Schizophrenia Bulletin. 2000;26(2):335-50.
8. Psychiatry AAoCaA. Practice Parameters for the Psychiatric Assessment of Children and Adolescents. Journal of the American Academy of Child and Adolescent Psychiatry. 1997;36(10 Supplement
):4S-20S.
9. Bostic JQ, King RA. Clinical Assessment of Children and Adolescents: Content and Structure. In: Martin A, Volkmar FR, editors. Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook. Philadelphia, P.A.: Lippincott Williams & Wilkins; 2009. p. 323-43.
10. Rothbart MK. Temperament, Development, and Personality. Current Directions in Psychological Science. 2007 August 1, 2007;16:207-12.
11. Thomas A, & Chess, S. Temperament and development. New York: Bruner/Mazel; 1977 1977.
12. Chess S, Thomas A. Temperament and the Concept of Goodness of Fit. . In: Strelau J, Angleitner A, editors. Explorations in Temperament Perspectives on Individual Differences. Boston, MA: Springer; 1991.
13. Manning C, Gregoire A. Effects of parental mental illness on children. Psychiatry. 2006;5(1):10-2.
14. Gilliam WS, Mayes LC. Clinical Assessment of Infants and Toddlers. In: Martin A, Volkmar FR, editors. Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook. Philadelphia, P.A.: Lippincott Williams & Wilkins; 2009. p. 309-22.