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Role of Psychologist in Adolescent Medicine

An International Perspective



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KEYWORDS

- Psychological assessment and interventions with adolescents
- Adolescent psychology • Adolescent mental health • Adolescent help-seeking
- Integrated behavioural health, focus on adolescent disorders, distress, development, need for team work • life skills and positive psychology
- Adolescent Counseling

KEY POINTS

- Adolescent mental health service use, supportive role of physicians for psychological issues, removing the stigma of accessing mental health services, holistic health of adolescents, involvement of family and community, teamwork by pediatricians and psychologists.

INTRODUCTION

As quoted by Shakespeare *“I would there were no age between ten and three-and-twenty, or that youth would sleep out the rest; for there is nothing in the between but getting wenches with child, wronging the ancientry, stealing, fighting.”*¹

Definition: *Adolescent psychology* is the field of psychology that focuses on the issues that are unique to adolescents. Adolescence is a time of fluctuating and rapidly changing interests and desires and many characteristics that are unique to this age.²

The branch of *Adolescent Medicine* addresses the health and health care of adolescents, young adults, and their families. Psychological aspects are very important in

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adolescents and a lot of aspects are preventive in nature.^{3,4} Many articles cite the load of adolescent cases in a pediatrician's office as being a quarter of the total caseload. A recent JAMA publication by Trent titled "Why Adolescent Medicine?" addresses the question reflecting the various domains whereby this age group requires attention.⁵

Importance of Dealing with Mental Health Issues to Promote in the Well-Being of Adolescence

Mental health is an important component of an individual's overall health, affecting all domain areas of life. The COVID-19 pandemic has brought to forefront the importance and exacerbation of the mental health burden globally.⁶

World Health Organization and Adolescent Mental Health

Worldwide, 10% of children and adolescents experience a mental disorder, but most of them do not seek help or receive care. Suicide is the fourth leading cause of death in 15 to 19 years old.⁷

Pattern of Referrals to Mental Health Services

It is interesting to analyze studies on pattern of referrals to clinical psychology services.

This study from Malaysia, analyzed 2179 referrals between January and December 2015 from 6 general hospitals and 3 mental health institutions that provide clinical psychology services. Results showed male referrals (60.3%), female referrals (39.7%), and adults (48.2%). Children (48.8%) and adolescents (28.1%) were mainly referred for psychological assessment.⁸

Parental Help Seeking Patterns Prior to Referral to Outpatient Child And Adolescent Mental Health Services

In this cross-sectional observational study, parents of 250 children were interviewed about pathways to outpatient child and adolescent mental health services (CAMHS). Educational services were the first help-seeking contact for the majority (57.5%) but referrals to CAMHS were most frequently from health care services (56.4%), predominantly general practitioners.⁹

Indian Scenario

The COVID-19 pandemic has given insight into the gaps in the current approach to mental health care and the need to expand India's mental health ecosystem.

According to a Lancet study and Global Health Data Exchange, India accounts for nearly 15% of the global mental health burden and 1 in 7 Indians is estimated to suffer from mental health disorders.¹⁰

Based on a WHO study, India has nearly 0.29 psychiatrists and around 0.07 psychologists per 100,000 population, compared with a median of 0.3 to 0.5 in low-mid income countries and 9 to 11 in high-income countries.¹¹

HISTORY

Historical Aspects for Adolescent Psychology

G Stanley Hall first proposed the term *sturm und drang* which related to the internal turmoil and upheaval during adolescence in his book—*Adolescence* in 1904.

In 1950s, Anna Freuds formulated her psychodynamic theory that believed the psychological disturbances associated with youth were biologically based and culturally universal while Erik Erikson focused on the dichotomy between identity formation and role fulfilment.¹²

Only in the 1980s, the less turbulent aspects of adolescence, such as peer relations and cultural influence, were addressed.

The first official organization dedicated to the study of Adolescent Psychology was the Society for Research on Adolescence in 1984. It discussed issues like understanding interactions between adolescents' various issues in their environments such as culture, society, and the nature versus nurture to get insight into their behaviors.¹³

If people successfully deal with the conflict, they emerge from the stage with psychological strengths that will serve them well for the rest of their lives.¹⁴

Child Psychologist David Elkind has built on the work of the child Psychologist Jean Piaget and focused on the cognitive, perceptual, and social aspects of healthy development. His research and writing have included the effects of stress and the importance of creative spontaneous play for healthy development and academic learning.¹⁵

In 1927, Jane MacFarlane founded the Institute of Human Development at the University of California. She launched the Berkeley Guidance Study which focused on the development of children in terms of their socioeconomic and family backgrounds.¹⁶

The Oakland Growth Study, initiated by Harold Jones and Herbert Stolz in 1931, aimed to study the physical, intellectual, and social development of children in the Oakland area. Longitudinal data were collected from 1932 to 1981 on the individuals that extended past adolescence into adulthood.¹⁷

The pioneering longitudinal studies of child development were launched in the 1920s and 1930s. These followed their young study members well past adolescence into the middle years and later life. Glen Elder in the 1960s proposed a life course perspective of *adolescent development* and formulated several descriptive principles of adolescent development.¹⁸

DISCUSSION

Adolescence has been defined as a period of storm and stress, and this is the time that young people develop their own independent identities and develop important competencies. They are very dependent on peer approval and acceptance, and this often pushes them into risk-taking behaviors to prove their mettle.

As an adult, one often finds it hard to figure out why adolescents take the risks they do. The reasons are twofold. On the one hand, they are doing it to impress their peers and gain acceptance in the group. The other is that the way they process information cognitively is fundamentally different from the patterns of cognition adults' show.

They may not calculate trade-offs between risk and reward the way adults might, in a linear, rational, logical, and verbal manner. Rather, they rely on the gist of what they know about the situation, and intuition to make the final call.

Many attribute this pattern of cognitive processing to the thinning of gray matter and pruning of synapses that occur at this developmental stage. However, it is also found that pruning is in fact essential for the young person to be able to develop sound and healthy decision making, which is also no doubt shaped by experience, contextual factors, and cultural values.¹⁹

Adolescent Identity

Many studies have been conducted on various aspects of adolescent Identity formation which gives good insight to decide interventions.²⁰

Romantic Relationships

Romantic relationships constitute a new dimension in the adolescent's social life. Defined as developmental tasks, they have been associated with both positive and

negative outcomes. This study analyzed data from a sample of 747 adolescents from Andalusia (Spain) between 13 and 17 years old (50.5% girls, mean age wave 1 = 14.55, SD = 0.84). The Structural Equation Modeling analysis showed romantic relationships as a predictor of psychological well-being, having a positive link with positive interpersonal relationships and with life development, and a negative link with autonomy and self-acceptance.²¹

Different Sexual Orientations - Lesbian, Gay, Bisexual, Transgender, and Questioning

The role of psychologists on issues of gender identity and gender expression is very important for adolescence. Adolescents will benefit from support from their educators in developing a professional, nonjudgmental attitude toward people who may have a different experience of gender identity and gender expression from their own.²²

Perspectives from the Adolescents

When we think of psychological issues of adolescents it is also important to understand the perspective of the target group that is the AYA - adolescent and young adults themselves. This study concluded that generally, adolescents cared more about the psychosocial aspects of health than the physical dimensions. They also considered factors such as independence, communication, socioeconomic conditions, mental health, religion, and educational facilities synonymous with the concept of health.²³

Intervention Areas in Adolescence

The key areas whereby medical and psychological intervention would be required can be divided into the broad categories of *disorder or deviance, distress, and development*.

Disorder or deviance: Horowitz has made an interesting distinction between these conditions, showing how extenuating circumstances can lead to disorder or deviance on the one hand, which can be diagnosed using a standard nosology.

These can be defined or described as internal psychological dysfunctions. However, a pediatrician can also identify conditions that are not internal psychological dysfunctions but instead are natural responses that nondisordered people make to stressful conditions.²⁴

Distress and development.²⁵

The conditions, which we may label as distress, are an important area of work for both the mental health professional as well as the adolescent pediatrician. Distress can occur due to chronic familial discord, body image issues arising out of social norms and stigmatization, broken relationships and so forth. A trained, sensitive pediatrician can pick up signs of these conditions and their impact on the physical and mental health of the young person.

Very often, in addition to the diagnostic skills or treatment of physical or mental disease, it is equally important to build on existing skills and resiliencies and empower the adolescent to deal with the stressors faced in life.

Positive psychology is the scientific study of the strengths that enable individuals and communities to thrive. The field is founded on the belief that people want to lead meaningful and fulfilling lives, and is thus concerned with *eudaimonia*, meaning "the good life" or flourishing.²⁶

Whom to refer to²⁷

The term psychologist clearly expresses the training background the person has in the field of Psychology, the minimal training being a Master's degree, with adequate

supervised field experience; a Doctoral degree would be preferred. All psychologists are trained in the basics of psychometric assessment and psychotherapeutic intervention.

Clinical psychologists are specifically trained to work with persons with severe mental health conditions and typically work in a team with a psychiatrist or a neurologist, the latter if they specialize in neuropsychology. The psychometric assessments they are specially trained to use, therefore, align with these cases and would help to diagnose psychiatric (eg, psychosis, obsessive-compulsive disorder, and so forth) or neurologic conditions (eg, dementias, amnesic disorders, and so forth).

Psychotherapists preferentially choose intervention rather than focusing only on assessment and therefore take further specialized training in specific psychotherapeutic approaches.

The word Counselor has been overused and often loosely applies to persons who have backgrounds in psychology, social work, or even special education. If one goes to a counselor, it would be best to ask for their training background or certification before beginning intervention, to ensure that they have the qualifications one wishes for.

Integrated Behavioral Health

The collaborative training between the various stakeholders in the CAMH should be enhanced. Currently, the favored methods, to augment the training for practicing primary-care physicians, such as CME and short training programs with their specific goals, settings, and methodology are well documented.

Given the biopsychosocial nature of human development and functioning, the high rates of co-occurring biopsychosocial problems and the fact that individuals commonly seek help for mental health problems from their primary care providers, psychologists recognize the need to work collaboratively with professionals from other disciplines. The concept of mind-body medicine is emphasized in the ancient Indian medicine system Ayurveda.²⁸

Clinical history taking and interviewing are one of the most powerful tools available to the child and adolescent mental health professionals to make a diagnosis and plan management. 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. 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.

Team Approach to an Adolescent with Mental Health Issues

The roles of the pediatrician and psychologist in the area of adolescent medicine are complementary and supportive of one another. In a pediatric OPD, a team approach that includes a psychologist, a social worker, and perhaps even a nutritionist, can prove very useful.

History Taking and Physical Examination

The primary referral could be to the pediatrician, with the focus of complaints being on physical symptoms such as skin eruptions, weight gain or loss, menstrual problems, and so forth.²⁵

However, on further exploration of psychosocial history by the pediatrician, the underlying psychological issues such as self-esteem issues, broken relationships or an

upcoming long-term relationship commitment, poor body image, unhealthy lifestyle and poor eating habits, gender confusion, stress pertaining to examinations or interviews, competitive career pathways, and so forth may come into play and such cases will benefit by referral to a psychologist.

Psychological and Psychometric Assessment

The first step at this point is usually a thorough assessment, usually carried out by a psychologist. The following section outlines the use of various psychometric tools and rating scales by the psychologist to unveil underlying psychological issues.

Assessment of Personality

Projective tests

Psychology offers an armamentarium of projective techniques which can be used to evaluate the psychological condition of children and adolescents.²⁹ The concept underlying projective techniques is that, when faced with unstructured material, a respondent is likely to project their own inner impulses and urges onto the material, thereby revealing hidden motivations and anxieties, fears, and concerns. The natural advantage of projective techniques is that the person being assessed is not aware of what is likely to be evaluated and is thus quite natural and unaffected by tension or stress as they perform.

Examples of semi-structured projective techniques include the Thematic Apperception Test and the Children's Apperception Test.³⁰ For both, there are International as well as Indian versions available, to be used as applicable. The test consists of a set of cards that have some human figures drawn on them in the case of TAT and animal figures in the case of CAT. The animal figures once again as viewed with ease by younger children for whom this test is designed. Stories built by the respondent around these cards, and the pictures seen by them, allow the psychologist to assess the respondent as per scoring protocols made available by the test developers.

Other, more unstructured projective techniques include projective play, human figure drawing, sentence completion, and so forth.

Objective assessments

Personality can also be assessed using empirical, objective tests such as the Minnesota Multiphasic Personality Inventory (MMPI, MMPI 2, and MMPI 3), The Millon Clinical Multiaxial Inventory (MCMI I, II, III, and IV), and versions of these tools specially designed for adolescent populations, such as Millon Adolescent Clinical Inventory (MACI) and the Millon Adolescent Personality Inventory (MAPI).³¹ These are internationally validated and normed tools and are used with equal comfort in India as well as in other countries.

Assessment of Intelligence

Another important area of assessment often needed in Child and Adolescent settings is the assessment of Intelligence. There are several tools available to the psychologist in this domain, ranging from tests that are internationally used, such as the Wechsler Intelligence Scale for Children (WISC, WISC III, and WISC IV) as well as local India tests such as the variants developed by Bhatia, Kamat, Mahendrika Bhatt, and Malin.^{32,33} Several figural tests are also available for an intelligence assessment in case the child or adolescent has difficulty with verbal material, for example, the Raven's Colored, Standard, and Advanced Progressive Matrices, among others.

Surveys and Rating Scales

The pediatrician may also work together with the psychologist on the team, and use rating scales that proven reliability and validity and have been used earlier in the country and cultural setting whereby the pediatrician is working. A detailed review of rating scales and their interpretation can be reviewed.³⁴

Interventions

Once a thorough evaluation has been completed, it is possible for the team, including the adolescent pediatrician and the psychologist, to conduct *individual or group interventions* to address the issue.

Individual counseling may use cognitive therapy, or client-centered approach as a base.

Supportive Role of Pediatricians/Adolescent Physicians in Psychological Issues in Adolescent

Though the role of the psychologist is so important in adolescent health, unfortunately such service may not be easily available at all centers and referral may not be easy. For this, it may often become necessary for adolescent pediatricians to get trained in delivering what we can call first aid counseling and play the important role in.

1. Helping to remove the stigma attached to going to a mental health professional and
2. Motivating clients to accept the referral to a psychologist when available

Psychosocial Interviewing of Adolescents by Adolescent Physicians

Adolescent pediatricians are trained to take a detailed psychosocial review of an adolescent in addition to the medical history and the physical examination. There are many specialized protocols:

1. American Medical Association (Guidelines for Adolescent Preventive Services, or GAPS³)
2. American Academy of Pediatrics³⁵
3. HEADSS

In India, most Adolescent Pediatricians are using the HEADSS while Interviewing teenagers.

- HEADSS was designed by Dr Henry Berman in 1972 and modified by Eric Cohen in 1985. It has been successfully used in adolescent clinics across USA and many other countries.³⁶
- HEADSS stands for - *Home environment, Education/Employment, Activities -peer-related, Drugs, Diet, Sexuality, Suicide/depression*
- In 2004, HEADSS was further expanded to *version 2 HEEADSSS (or HE2 ADS3)*, whereby E for Eating, and S for Safety from injury and violence, was added.³⁶
- The 2014 The HEEADSS 3.0 update includes 2 important additions:

(1) Media and (2) strength-based approach. An alternative acronym, SSHADESS, accounts for this strategy. Strengths, School, Home, Activities, Drugs/substance abuse, Emotion/depression, Sexuality, Safety.³⁷

Pediatricians are giving such guidance that can be called *preventive counseling* and *Anticipatory guidance* to the parents right from infancy in the well-baby clinic.

- a. Handling of common behavioral issues such as temper tantrums, thumb sucking and so forth

- b. Age-appropriate developmental aspects and behavior.
- c. Guidance for the healthy lifestyle that promotes positive behavior—sleep, diet, exercise and so forth.

Preventive Counseling for Parents – Dealing with Adolescents

Use a strengths-based approach

- Approaches based on risk factors alone may induce feelings of shame and deter engagement.
- Identify strengths early, so that they can be “built on” when motivating to change or when encouraging ongoing success.
- Praise when it is warranted!
- Use reflective listening and pause. This allows the teenager time to confirm and expand on his or her thoughts.
- Create a comfortable, trusting, nonjudgmental setting that communicates respect.
- Share your concerns.³⁷ (Table 1)

The following *case scenario* shows how a combination of pediatric approaches to health and lifestyle management, psychological evaluation of overlaid mental health issues, and positive psychology/life skills-based approaches can be used to diagnose and course correct for a disorder, alleviate distress and guide a patient toward development.

*Case Scenario - SSHADESS Approach of History taking*³⁷
Strengths - excels in academics.

School – has consistently conducted well at school.

Home - Her parents are going through a lot of conflicts which threatens to culminate in a divorce. They often vent their anger by scolding her over her relatively poorer grades and her body shape and weight.

Activities - She was good at sports and was taking part in extracurricular activities enthusiastically.

Drugs/substance abuse – No significant history.

Emotion/depression - she finds herself unable to concentrate on the studies. She feels she is unattractive and obese and has begun resorting to fad diets and intermittent fasting over long spells.

Sexuality - No significant history.

Safety - No significant history.

Team approach of pediatrician and psychologist

The pediatrician places Sonia on a healthy nutritive diet and exercise routine after proper counseling, and the psychologist on the team speaks to her over 4 to 5 sessions, showing her how focusing on her own wellbeing may not only render her happier, but perhaps yield additional gains in terms of better self-esteem which in turn will help her deal with her parents’ anger, which she comes to understand and empathize with, over the counseling sessions. Counseling of parents is also conducted to improve the home atmosphere.

Screening Tools Used to Identify Referrals to Mental Health Professionals

Various screening tools we use are *CRAFFT Screening Test* is a short clinical assessment *tool* designed to *screen* for substance-related risks and problems in adolescents.³⁸

Table 1
Role of Pediatrician in preventive counseling and anticipatory guidance

Items	Psychological Impact and Risky Teen Behavior	Preventive Counseling	Anticipatory Guidance
Issues related to puberty and body changes	Body image issues affecting self-esteem Eating disorders Anxiety, depression affecting other domains – academics, interpersonal relationships and so forth Guilt regarding masturbation	Life skill education Enhancing self-esteem and coping skills	To prevent reproductive tract infections
Sexuality Gender-related issues	Risky sexual behavior Anxiety confusion regarding sexual orientation/identity	Age-appropriate sexuality education	Safe sex and healthy intimacy
Romantic relationships	Inability to handle toxic/abusive relationship	Life skills to understand negotiating skills and learning the ability to say no when necessary	Age-appropriate education about the intimacy and prevention of teenage pregnancy
Tobacco alcohol substance abuse	Peer pressure to experiment leads to recreational use to dependence on addiction	Impact on the developing brain with teen use of tobacco, alcohol, impact on a fetus in teen pregnancy and understanding addiction to prevent experimentation	Parental guidance to discuss and also look for flag signs.
Internet addiction – social media, chat rooms, porn gaming and so forth	Not being happy or feeling lonely due to various psychological issues and turning to media for solace or under peer pressure	Scientific knowledge of all these issues including suppression of melatonin by a blue screen and adverse effects of sleep deprivation	Parental guidance to monitor media use and flag signs of internet addiction and being role models for healthy media use
Healthy lifestyle	Obesity and risk of NCDs due to unhealthy diet and lack of physical activity	Scientific knowledge and prevention	Parental guidance
Underage driving DUI - Driving under influence Lack of helmet and safety belts.	Legal issues that can affect career prospects.	Respecting rules and laws and consequences of flouting them	Parental guidance and monitoring for safe vehicles us

Source: table made by authors.

If one gets a history that is suggestive of depression, we use screening tools such as PHQ (Patient Health Questionnaire) Beck's depression inventory screening for suicide behaviors' such as Suicide Behaviors Questionnaire (SBQ-R)^{39,40}

Collaboration Between Psychologist and Adolescent Pediatrician

Development

The role of the pediatrician in Development areas is amply clear and unambiguous. These are areas whereby the client clearly has no psychological problems, but some issues are preventing the full expression of potential. Let us use a Case example of Sports Psychology here.

Case scenario. A pediatrician may see a youngster who has shown excellence in sports and has the potential to reach State or National levels in sports competitions. However, it is clear that the client loses confidence at a key juncture or seems to lack the focus and mindset needed during important matches to win.

The pediatrician and psychologist may work together along with a trainer or coach and help develop strategies, self-messages, and cues for the young person to use at these junctures, whereby they are on their own and cannot turn to others for help.

Having learned these strategies and techniques and practiced them thoroughly, the player is now set to use them at short notice even when they are on the field of in the midst of a tournament.

Distress

The pediatrician's role may vary from mere sharing and self-disclosure to take away the stigma of counseling, to some problem solving and advice-giving whereby the client seems puzzled and cannot choose between various alternatives that present themselves.

Going deeper, the pediatrician may also gently explore pain points that exist either in the client's surround, such as parents who are conflicted and thus not empathic. Or the issues may exist with the client, such as poor self-esteem or indecisiveness and lack of confidence.

All of the above may fall within the domain of Distress, and can safely be handled by a pediatrician, sensitized fully to the notion that referral to a psychologist would be required if the matter seems to be moving into the domain of Disorder.

Disorder

This is the domain whereby there is a clear-cut presence of mild mental conditions such as anxiety, or severe conditions such as an imminent psychotic breakdown. In these instances, a trained psychologist needs to step in, and in the case of severe mental illness, a psychiatrist's help would also be recruited to medicate the client appropriately.

Child and Adolescent Depression

This is a particularly delicate and sensitive area. Cases involving depression, suicidality, or depressed and traumatized states arising out the abuse of a physical and sexual nature, mandate intervention by a psychiatrist at the earliest to protect the wellbeing and safety of the client. POCSO is an Act passed in India to protect clients exposed to Child Sexual Abuse and protocols are very stringent for the same [SB45].⁴¹

The table later in discussion addresses a very important area, which falls under the domain of consultation liaison, whereby the pediatrician and psychologist can work together to make a difference to the client. Not much work is happening in this area at present, but there is a high felt need for the same.

This is the area whereby the young person is suffering from purely physical complaints, which in turn affect their self-image, their self-esteem, and their adjustment to social settings. Some examples of such problems include.

- i. Body weight-related issues such as obesity or being underweight, which lead the client to believe that they are very unattractive and makes them step back from other life situations whereby they could easily succeed.
- ii. Skin-related complaints such as Vitiligo or Acne, which once again lead to poor self-image making clients shy away from public appearances.
- iii. PCOS, with associated complications of menstruation, weight gain, and skin problems.
- iv. Deficiencies due to nutritional imbalance which leads to associated problems that once again reflects in behavior and lifestyle.
- v. Chronic pain due to conditions such as autoimmune problems or sports injuries which lead the young person to be embittered and in a constant state of distress and negativity.
- vi. Chronic illness such as juvenile diabetes, epilepsy, early-onset arthritis, allergies, and so forth force the young person to retreat into their shell, and make them believe that they can never live a “normal” life of a youngster like their friends can enjoy.

It is important that a pediatrician–psychologist team creates modules to intervene in the above issues, beginning with a broad universal application whereby awareness about the conditions is built up in a community and following up with support groups, lectures, and webinars as well as audio–visual and reading material which can be used for self-help.

A detailed history taking following the earlier elaborated HEADSS protocol would be a precursor to this management process (**Tables 2 and 3**)

Importance of Nongovernmental Organizations Working for Awareness and Education on Mental Health Issues

In low- and middle-income countries (LMICs) like India, trained mental health professionals are low in number, when one keeps the overall ratio of the huge population to be served in mind. A large portion of this population is difficult to reach as they are in villages and smaller towns, and do not have access to large urban and metropolitan health centers. A purely biomedical and institutional-based approach can work in settings with lower and more accessible populations, whereas LMICs do not have the necessary infrastructure. Also, several important sociocultural factors come into play, which demands a more community-based approach. In India, the District Mental Health Programs and National Mental Health programs have accepted nongovernmental organization (NGO) partnerships as the means for primary care delivery.¹⁰

Role of Nongovernmental Organizations to Promote Awareness and Education About Mental Health Issues and Removing Stigma for Going to Mental Health Professionals

All 3 authors are actively working in AACCI – Association of Adolescent and Child Care in India for the last 15 years. AACCI works for the holistic health of children and adolescents through parents and teachers who are the main pillars of their well-being.

Its core group consists of doctors from various mental health professionals, educationists, parents, sports experts, and family lawyers (<http://www.aacci.in/> and <http://www.aaccitrainingprograms.com/>).

Table 2**What can the pediatrician handle and when to refer**

Issues to Be Handled	Role of Primary Physician/ Pediatrician	Referral to Psychologist	Referral to Psychiatrist
Chronic physical illness, for example, epilepsy, diabetes Or Chronic Pain	Pediatrician/physician would advise on the medical management of the condition	Psychologist and/Pediatrician/ Physician may handle the psychological sequelae of anger about the condition.	May not be required unless there is serious depression, and so forth
Chronic conditions that undermine self-image, for example, Obesity, Vitiligo, PCOS and so forth	Pediatrician/physician would advise on the medical management of the condition	Psychologist and/Pediatrician/ Physician may handle the psychological sequelae of the conditions for example, shame, feeling self-conscious about body, or facing body shaming.	May not be required unless there is serious depression.
Life threatening conditions such as Cancers.	Pediatrician may not be the primary treating physician, but families often prefer to follow-up with trusted pediatrician in spite of availing of specialist help.	Psychologist may help conduct support groups, offers supportive counseling.	May not be required.
Anxiety spectrum disorders, Panic, Phobias, OCD	To identify and explain to the patient about the symptomatology	Psychotherapy – CBT REBT will be required for specific phobias Generalized anxiety disorders PTSD and OCD	Severe cases will require the medication and identification and treatment of comorbidities
Depression and Suicide risk	To identify and explain to the patient about the symptomatology Primary counseling can be conducted for mild depression.	Moderate depression will need counseling and psychotherapy. Urgent psychiatric referral and admission in case of suicide risk.	Moderate to severe depression will require medications in addition to counseling

Personality disorders	To identify flag signs and explain them to parents. It must be kept in mind that PDs are not formally diagnosed till 18 y	For assessment with scales such as MCMI, MACI, and so forth. Psychotherapy for serious conditions such as borderline personality disorder.	Medication to address specific symptoms whereby possible; identification and treatment of comorbidities
Psychotic spectrum disorders	To identify flag signs and explain to parents Motivation to referral to psychiatrist	Supportive counseling in addition to psychiatrist treatment, Psychosocial interventions. Rehabilitation and support groups.	Medication for the condition, identification, and treatment of comorbidities
Substance and Nonsubstance addictions	To identify flag signs and explain to parents Motivation to Referral to psychiatrist	Supportive counseling in addition to psychiatrist treatment. Work with parents and support system, behavioral interventions.	Deaddiction treatment and identification and treatment of comorbidities
ADHD, Autism spectrum and neurodevelopmental disorders, LD, Intellectual Disability, and so forth	To identify flag signs and explain to parents Motivation to Referral to psychologist and psychiatrist/ neurologist/educator.	Supportive counseling in addition to psychiatrist treatment. Work with parents and support system, behavioral interventions.	Deaddiction treatment and identification and treatment of comorbidities

Source: table made by authors.

Table 3		
Approach to the management of and adolescent		
Clinical Presentation	Steps in Management	Intervention Approach
Body image issues	Treatment of minor ailments Ensure knowledge about normal pubertal changes Counseling to increase self-esteem Assessment of psychological and psychiatric problems	Medical intervention Psychoeducation Client-centered approach Referral to psychologist/ psychiatrist
Eating disorders: Anorexia Nervosa and Bulimia	Nutritional counseling and maintenance of healthy weight Medical management of comorbidities Psychotherapy Suicide risk assessment and management	Nutritionist, Physician plans meals OPD monitoring Vitamin, mineral supplements Hospitalization if required Referral to psychologist for cognitive behavior therapy or acceptance and commitment therapy for body image issues Family and group therapy Psychiatric referral whereby needed. Teamwork to ensure risk management.
Internet addiction	Treatment of minor ailments such as poor diet Counseling to explore reasons for addiction Behavioral methods to manage addictive behavior Cognitive behavior therapy, rational emotive behavior therapy	Medical intervention Client-centered approach Family and group therapy Psychologist referral Psychologist referral
Poor academic performance	Medical management Management of psychological comorbidities	Pediatrician explores systemic illness, genetic disorders, visual, or hearing impairment Psychologist referral to assess low or borderline IQ, learning disabilities, attention deficit hyperactive disorder, conduct disorder, oppositional defiant disorder.

Source: table made by authors.

Group Surveys for Adolescent Mental Health

We have conducted many surveys in many schools across India using rating scales and focused group discussions to try to find out trends seen in the population to be addressed [SB47]⁴²⁻⁴⁵

Group Interventions

We regularly conduct Group interventions such as interactive workshops, small group discussions, which use the Life Skills perspective as a base, using pre and postworkshop surveys to reassess postintervention to study impact.

Life skills Life skills have been defined by the World Health Organization (WHO) as "the abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life."⁴⁶ LSE programs can reduce risky adolescent sexual behavior and also reduce the incidence of HIV transmission and AIDS^{47,48}

WHO Life skill education -LSE program trains adolescents in Life skill training .This empowers young people to take positive actions to protect themselves to promote health and positive social relationships.

CLINICS CARE POINTS

- Adolescents don't open up easily. Hence Rapport building rapport is crucial
- Adolescents may often come with physical symptoms that are the result of their mental turmoil
- Observe body language carefully as it may tell you more than what is being said verbally
- Important to take the help of psychological assessments whereby necessary
- Important to refer serious cases to mental health professionals
- Involvement of family is very important for getting good results
- Anticipatory guidance and preventive counseling can be conducted by the primary physician
- Psychologist should be involved in specific counseling and psychotherapy

DISCLOSURE

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