Child India

May 2023

Monthly e-Newsletter of Indian Academy of Pediatrics

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CONTENT

Editor's Note

Dear friends,

The month starts with World Asthma Day on May 2nd (Theme - "Asthma care for All ") which was celebrated actively by many IAP Branches. The Asthma care for All message promotes the development and implementation of effective asthma management programs in all countries. GINA is striving to reduce this burden of Asthma by encouraging health care leaders to ensure availability of and access to effective, quality-assured medications.

The International Thalassemia Day – May 8th (Theme – "Strengthening Education to Bridge the Thalassaemia Care Gap") was celebrated with the theme aimed at enhancing the understanding and expertise of individuals affected by the disease, with the goal of narrowing the gap in thalassaemia care. The focus was on improving the skills and knowledge of patients to empower them to take control of their health and manage the condition more effectively.

The theme for this year's World Lupus Day (purple day) celebrated on May 10th was "Make Lupus Visible" to raise public awareness about lupus diagnosis and its social, economic and psychological impacts.

Our President Dr Upendra Kijawadekar has been traveling to all corners of the country with his flagship program Sankalp: Sampoorna Swasthya. It is reaching out to the community through school programs. We need to do our bit in rolling out this useful community outreach program to all nooks and corners of our country to help our teens to pass through this tunnel of 'adolescence' safely to become useful and effective citizens of our country.

To create an awareness of adolescent issues, which is the focus of Sankalp: Sampoorna Swasthya program, this issue of Child India has excellent articles submitted by adolescent experts from our Academy, coordinated by Dr Atul Kanikar. We thank all of them for sharing their vast experiences with us.

Happy reading,

Yours in Academy service,

Dr Jeeson C Unni
Editor-in-Chief

President's Address

Dear fellow academicians,

Empowering parents with some finer techniques of coping with adolescents at home is a very important skill that we pediatricians can teach. Parents are some of the busiest people, and we know they usually juggle several schedules, have an enormous list of things to get done each day and have little time for 'extras' such as attending parenting sessions. We should realize that there is no perfect answer to the problems parents face as each situation, each parent and each child is unique. For that reason, this particular issue gives pediatricians basic guidelines on topics like behavior modification and timely referral, essentials of POCSO act, trends in substance abuse and finally a very sensitive yet important topic like sexual abuse. These tips can easily be adopted into our own style. While interacting with children some teaching methods should be learnt and used until they become second nature; as we use the skills, we expect positive behavior change in children.

One of the core elements of successfully handling a difficult adolescent is spending time with them. we can only help them if we are with them. it is as simple as that. Family bonding is a very important virtue that helps adolescents in overcoming some extremely stressful situations. One who has enjoyed the richness of family bonding understands that spending time together is the glue that holds a family in tough times.

Peer pressure is another very important influence and a powerful force in almost every adolescent's life. Children face this pressure from the very first time they play with other children. And with all of the things available to kids today peer pressure is a major worry for teenagers. we can't make peer pressure go away as it's a natural part of growing up but we can help children how to deal with it.

Monitoring is another very important tool that we should teach the parents of adolescence as it keeps them involved and let adolescence no that parents care about them and their safety. Other benefit is adolescence will have fewer opportunities to get into trouble because they will not be spending too much unsupervised time with other kids. Finally, I came across a very simple but profound statement that if you don't monitor your kids someone else will be in charge of what they do and what they learn and that is taking a big chance.

Happy learning,

Dr Upendra Kinjawadekar
National President 2023
Indian Academy of Pediatrics

Secretary's Message

Dear Colleagues,

Greetings,

"Efficiency is doing better that what is already being done."

I am delighted to share with you some of the amazing achievements we have accomplished in the month of May, as we continue to work hard to improve the lives of children and families across the country. We have organized and participated in various workshops, campaigns, and events that focused on child health and development issues. We have also forged stronger partnerships with other organizations and stakeholders who share our mission and vision.

One of the highlights of this month was the celebration of the "World Thalassemia Day" on 8th May, 2023, under the theme - " Be Aware. Share. Care: Strengthening Education to Bridge the Thalassemia Care Gap" decided by the CIAP. I would like to express my gratitude and admiration to all Office bearers, Executive Board members, and Office bearers of branches for their active involvement and contribution in making this day a success.

On the administrative front, we have held several meetings via video conferencing to discuss and review various matters related to our organization. On 7th May, 2023, a Special General Body Meeting was held at Navi Mumbai. Office Bearers Meetings were held on 4th May, 10th May and 12th May respectively. An E-voting Committee meeting was convened on 17th May, 2023. A State Branch Office Bearers from South Zone Meeting was conducted on 18th May, 2023, where representatives from Karnataka, Kerala, Tamil Nadu and Pondicherry attended. The meeting addressed various challenges and opportunities faced by the branches and suggested solutions and strategies to overcome them. The meeting also acknowledged the progress and efforts of various programs and activities carried out by the branches. On 24th May, 2023, another IAP e-Voting committee meeting was scheduled via video conferencing.

Along with this, Indian Academy of Paediatrics conducted workshops under the Presidential Action Plan 2023 on the following modules under the Presidential Action Plan 2023. 1 of "Risk Stratification Assessment Clinical Monitoring Early Stimulation in high-risk neonate"(RACE); 2 of Infectious Case Conundrum (ICC); 1 of Understanding Lab Test Rationale (ID ULTRA); 1 of Comprehensive nutrition Module (CNM); 3 of Hematology - from care to cure. These workshops are aimed at improving the quality of care and outcomes for children in India. They are also a platform for sharing best practices, experiences and challenges among paediatricians. The IAP hopes that these workshops will contribute to its vision of a healthy future for every child in India.

Regarding the ECD, we have completed a total of 155 workshops of ECD so far and 12 workshops of ECD in May 2023. This month, we have also successfully conducted 39 Basic NRP and 05 Advanced NRP provider courses.

On behalf of IAP, I urge you to organize various activities in the best interest of the health and welfare of the country's children.

Long Live IAP, Jai IAP

Yours sincerely,

Dr Vineet Saxena
Hon. Secretary General 2022 & 23

President's Engagements

With Dr Jamal Raza,President Pakistan Pediatric Association and
Dr M Hussain IPP Bangladesh pediatric society

President's Engagements

On the invitation from Dr Ganesh Rai President , Dr Krishna Poudel HSG and the members of Nepal pediatric society,I was fortunate to attend their 20th annual conference in Kathmandu.

Happy to share that for the first time IAP has signed an MoU with any other national pediatric society for academic and educational cooperation through organisaing CMEs, providing training opportunities for online learning by use of our dIAP webinars etc.

In the same meeting I could also interact with Dr Jamal Raja President Pakistan Pediatrics association as well as of SAPA, Dr M Hussain IPP Bangladesh pediatric association and could devise some common action plans.

Dr Vipin Vasishth, Dr Ranjan Pejavar were also representing from India. Special efforts from Dr Ranjan Pejavar convener of IAP beyond borders in the execution of the event are highly appreciated.

President's Engagements

On 23-5-23, Happy to witness the inauguration of the regional hub of training for beta Thalassemia at CTC,PHO & BMT centre Borivali Mumbai.

This is IAP's attempt to strengthen the Thalassemia care system through partnership with ECHO India.

In the pilot project we are having similar centres at Kolkata and Bhopal.

Must thank Dr Sandeep Bhalla from ECHO as well as Dr Mamta Manglani and Dr Nita Radhakrishnan for this initiative and for involving IAP.

IAP is Partnering with BMC in Mumbai, Kolkata municipal council in WB and NHM in MP.

Together let's march towards ZERO THALASSEMIA.

President's Engagements

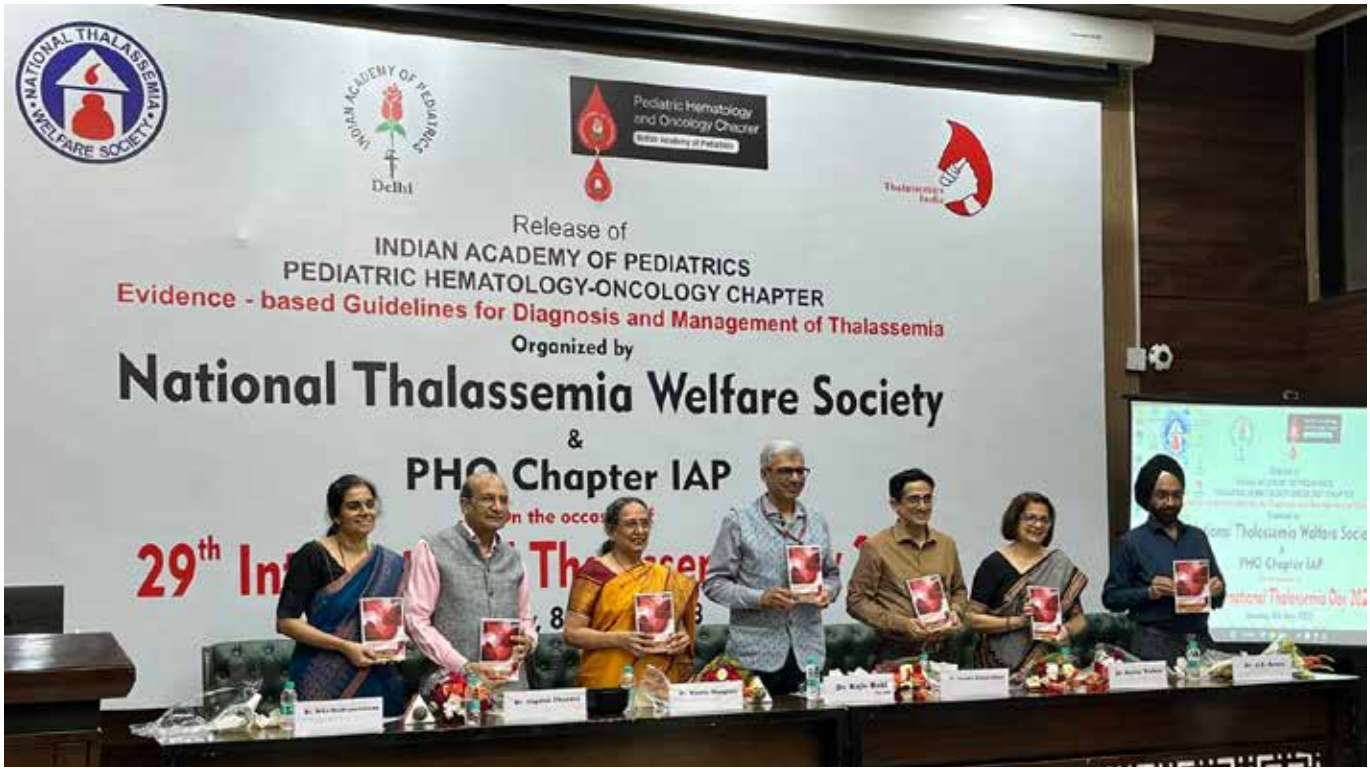
SANKALP: SAMPOORNA SWASTHYA AT LUCKNOW

President's Engagements

Along with the OBs for the POINT workshop at Navi Mumbai on 6th May

SGM at Navi Mumbai on 7-5-23

President's Engagements



Along with Dr Rajiv Bahl, Dr Mamta Manglani, Dr Jagdish Chandra,Dr Nita Radhakrishnan and Dr Amita Trehan at the release function of Thalassemia guidelines in New Delhi on 8-5-23

Mid term CME of the ID Chapter on 13th May 23

President's Engagements

Pediatric CME at Darbhanga on 21-5-23

Mount summer convent school Darbhanga Bihar for SSS program on 22-5-23

President's Engagements

Opening of the Regional hub for the Thalassemia training centre in Mumbai on 24-5-23

Qq

Along with Dr Sanjay Niranjan, Dr Anurag Katariya, Dr Utkarsh Bansal
for the SSS program in Lucknow

President's Engagements

Along with UNICEF officials and Dr Banapurmath, Dr Elizabeth, Dr Praveen Kumar, Dr Simin Irani, Dr Sanjay Prabhu for the B4E program on 28-5-23

Cancer foundation of India, American Cancer society, FOGSI and IAP plan the launching of the HPV vaccination program in Mumbai on 30-5-23

Adolescents Stress

C. P. BANSAL
Gwalior

Key facts

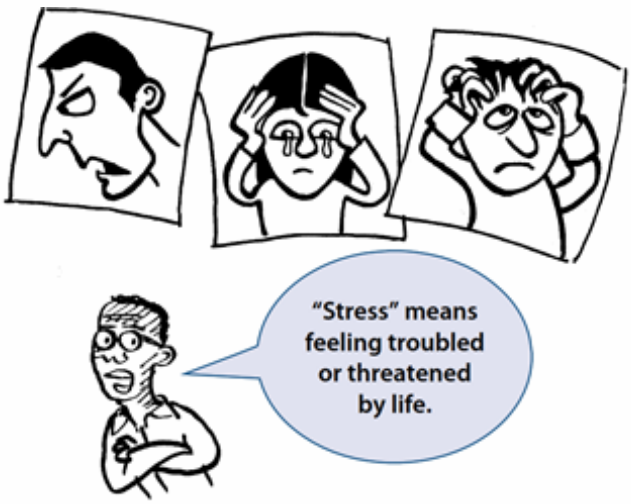
- **Over 1.5 million adolescents and young adults aged 10–24 years died in 2021, about 4500 every day.**
- **Half of all mental health disorders in adulthood start by age 14, but most cases are undetected and untreated because there is no tolerant adult "listener" in childhood and tender teenage.**
- **Globally, one in seven 10-19-year-olds experiences a mental disorder, accounting for 13% of the global burden of disease in this age group.**
- **Depression, anxiety, and behavioural disorders are among the leading causes of illness and disability among adolescents.**
- **Suicide is the fourth leading cause of death among 15-29 year-olds.**
- **Failing to address adolescent mental health conditions result into impairing the physical, social and spiritual health and jeopardising the opportunities to lead fulfilling lives as adults**.

Teen stress is an important health issue. The early teen years are marked by rapid changes — physical, cognitive, and emotional. Young people may also face other challenges, including changing relationships with peers, new demands at school, family tensions, or safety issues in their communities. The ways in which teens cope with these stressors can have significant short-and long-term consequences on their physical and emotional health.

What is stress?

Stress is the body's reaction to a challenge or change. Adolescence is a phase of rapid change in all spheres of life; hence the stress is most common in this age.

Stress is a physical and emotional reaction that people experience as they encounter challenges in life. (NIH definition):

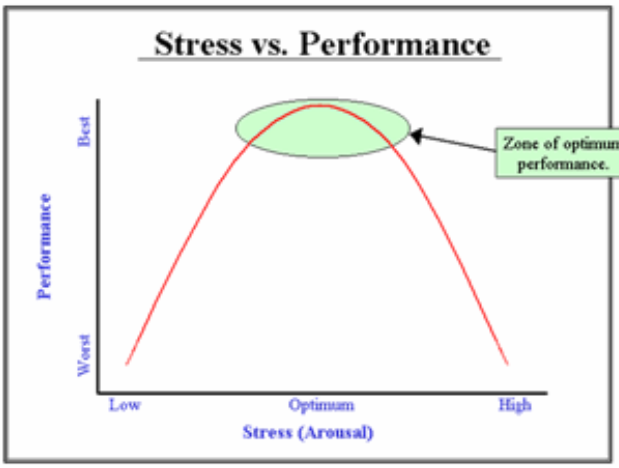


Good stress versus bad stress: We all experience both "good stress" and "bad stress."

Good stress is that optimal amount of stress that results in our feeling energized and motivated to do our best work. Good stress

encourages us to develop effective coping strategies to deal with our challenges, which ultimately contributes to our resilience.

Bad stress occurs when our coping mechanisms are overwhelmed by the stress and we do not function at our best. The same event can affect children and adults in very individual ways—one person may see a carnival ride as thrilling and another may see it as a major stressor. Stress can become distress when we are unable to cope or when we believe that we do not have the ability to meet the challenge. The solution is to adapt, change, and find methods to turn that bad stress into good stress.



Acute Stress, Chronic Stress and Anxiety

Magnitude of Problem: Nearly 9 in 10 Indians suffer from stress. In fact, the recently released findings of the 2018 Cigna 360 Well-Being Survey - Future Assured, conducted by Cigna TTK Health Insurance, show that stress levels are higher in Indian compared with other developed and emerging countries, including the United States, the UK, Germany, France, China, Brazil and Indonesia.

According to Money control, the survey further revealed that 95 per cent of Indian millennial between the age group of 18-34 are stressed compared to the global average of 86 per cent. Making matters worse, one in eight Indians have serious trouble in dealing with stress but nearly 75 per cent of the Indian respondents said they don't feel comfortable talking to a medical professional about their stress.

Stressors in Adolescents: Stress is a response to external or internal challenges, pressures, or events. These are outlined in Fig.1.

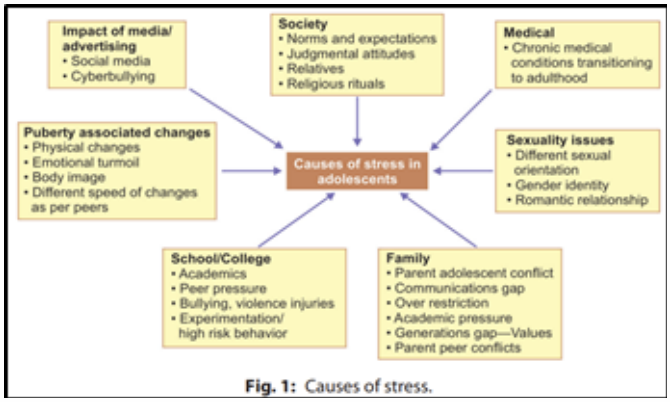


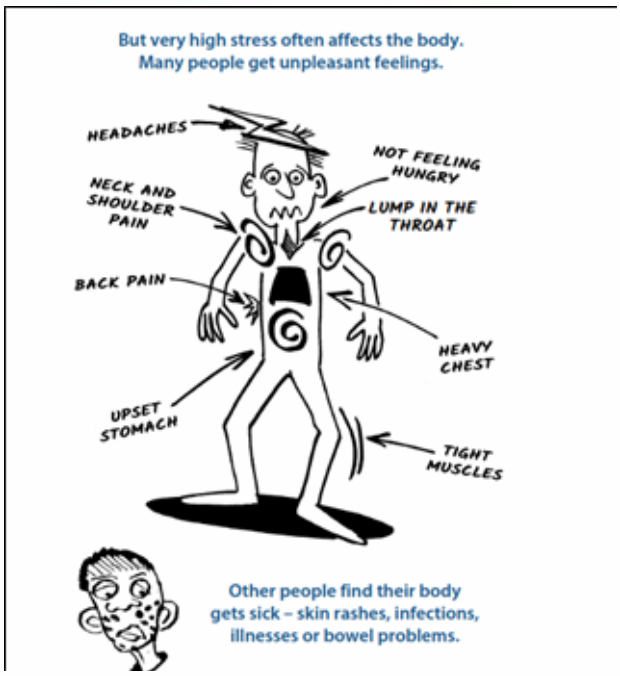
Fig. 1: Causes of stress.

Chronic Stress increases;

1. Heart rate
2. Muscle tension
3. Breathing
4. Glucose in bloodstream
5. Blood pressure
6. Build-up of plaque in arteries
7. Oxygen consumption
8. Risk of diabetes, peptic
9. ulcers, viral infection
10. Stress hormones

Relaxation Response decreases

1. Heart rate
2. Oxidative stress
3. Blood pressure
4. Stress hormones
5. Inflammatory cytokines Muscle tension
6. Elevated blood glucose



Ten signs of being "Distressed"

"I'm stressed out." You've probably said those words many times – but you may be surprised to hear them from your child. Undetected and unaddressed stress can cause permanent, irreversible damage to a child's developing brain. Older students may have the ability to recognize when they're overly stressed—but they don't always ask for help. Younger students typically lack the insight to recognize stress. Here are ten stress warning signs which should be looked in child.

1. Changes in appetite. Acute or short term stress suppresses the appetite. Prolonged stress has the opposite effect. Long-term stress releases cortisol, which increases appetite (usually causing cravings for high-fat, sugary foods).

2. Withdrawal from activities and friends. Stress can lead children to abandon the people and things they used to derive joy from—they may lose motivation or feel they're not good enough.

3. Irritability and impatience. Children dealing with intense stress experience strong emotions. Not knowing how to deal with these feelings, they often become moody and lash out at those around them.

4. Bedwetting. Stress doesn't cause a child to wet the bed, but some manifestations of stress—seeking comfort by eating salty snacks (that cause water retention) and sleep deprivation can make bedwetting worse in a child who is already prone to the problem.

5. Sleep problems. Stress puts the mind on overdrive. This can cause insomnia, nightmares, resistance to going to bed, or trying to work their way into the parents' bed.

6. Attempts to get out of school. Frequent trips to the school nurse and/or complaining that they "feel sick" in the morning and should be allowed to stay home from school are common symptoms of stress. A particularly major red flag is if kids try to get out of school on the day of an important exam.

7. Unusual and unexplained crying spells. Stress causes frustration. Younger kids especially may react to this frustration by bursting into tears.

8. Stomach aches and digestive problems. The fight-or-flight reaction triggered by stress causes a surge in adrenaline that primes the body to react to danger. Energy is diverted from "non-essential" functions such as digestion to the heart and muscles.

9. Excessive worry and negative thoughts. In older students, frequent statements such as "What if I don't get into a good college?" or "What if I don't get into the Honour Society?" can be signs of academic stress.

10. Drop in grades. Often, stress results from being overscheduled or taking classes that are beyond a student's ability. Grades often suffer as a result. This usually is the principal reason for visit to our clinics.

Unhealthy Ways to deal stress:

Addictions	Unproductive ways
Alcohol	Trying not to think about
Tobacco	Avoiding people, places or situations
Internet use	Isolating yourself - Staying in bed
Gaming	Starting Arguments
Drugs	Blaming
	criticizing oneself

Stress Management in Adolescents:

How to Press Reset on Stress?

There is no drug to cure stress. But we do have access to a built-in "stress reset button" that acts as an antidote to stress. It's called the relaxation response. In contrast to the stress response, the relaxation response slows the heart rate, lowers blood pressure, and decreases oxygen consumption and levels of stress hormones.

Pressing Reset on Stress - Can Be Done Anywhere, Anytime. At your desk, in your bed, or doing dishes, simple tools such as deep breathing, progressive muscle relaxation, and mindfulness can produce the relaxation response.

1. **Slow, Deep Breathing: (Also called diaphragmatic breathing)**

   For deep breathing exercises, take a few slow deep breaths, letting your abdomen expand as you fill up your lungs, then breathe out slowly and completely. Notice, where you may be holding some tension— throat, shoulders, chest—and relax, so that each breath becomes slower and deeper.

2. **Progressive Muscle Relaxation:**

   This technique involves relaxing different muscles in your body, progressing from head to toe, or toe to head. Briefly contracting each muscle before relaxing it can help you feel which muscle is tense. At the same time take deep breaths, inhaling through the nose and exhaling through the mouth.

3. **Mindfulness**

   For a mindfulness exercise, focus on being aware of what you're sensing and feeling in the moment—sight, sound, smell, taste, or touch. Mindful body scan practice involves focusing attention on different parts of your body and their sensations in a gradual sequence. You can combine mindfulness with the other muscle.

Almost all the relaxation techniques involve individual or combination of these three methods to control stress. The complete management involve;

1. Stress Management Tools for Adolescents
2. Healthy Lifestyle Management
3. Role of caregivers and adults in managing stress
4. Relaxation techniques
5. Various Available resources for further reading

Stress Management Tools for Adolescents

WHO recently has combined all these and formulated a very useful – easy to replicate and practice kit which is being summarised here;

Doing What Matters in Times of Stress

It is a WHO stress management guide for coping with adversity. This illustrated guide supports implementation of WHO recommendation for stress management.

There are many causes of stress, including personal difficulties (e.g. conflict with loved ones, being alone, lack of income, worries about the future), problems at work (e.g. conflict with colleagues, an extremely demanding or insecure job) or major threats in your community (e.g. violence, disease, lack of economic opportunity).

This guide is for anyone who experiences stress, ranging from Adolescents, Parents and other Care givers including professionals. Anyone living anywhere can experience high levels of stress – these steps/tools can be of help.

The audio version of the exercise may be downloaded from https://www.who.int/publications-detail/9789240003927to support you in practicing the skills and understanding.

Stress Management Tools (Quite useful for all age groups)

1. Grounding
2. Unhooking
3. Acting on values
4. Being Kind
5. Making Room

Tool 1: Grounding

During Stress-the common effects are we;

- ...cannot focus
- ...get angry easily quite disproportionate to the trigger
- ...can't sit still (restless)
- ...have difficulty sleeping (and awakening early morning)
- ...feel sad or guilty for certain mishap or self-constructed thinking that could be at times unreal
- ...worry
- ...cry
- ...feel very tired
- ...have changes in appetite.

We get difficult thoughts; Thoughts that blame others .... (He should not have done that. It's his fault.)

We make harsh judgments about ourselves... (I give up! It's all too hard!)

We are troubled by reappearing of memories about difficult events...

We get thoughts about future, especially about what we fear...

We also get thoughts where we worry about others (Is she ok? Where is she now?)

There are many kinds of difficult thoughts and feelings that can hook us.

These powerful thoughts and feelings are a natural part of stress. But problems can occur if we get "hooked" by them. Because then our efforts (behaviour) and performance suffers.

Thus, the triad of feeling, thinking and behaviour are interlinked.

These powerful thoughts and feelings are a natural part of stress. But problems can occur if we get "hooked" by them. Because then our efforts (behaviour) and performance suffers.

Thus, the triad of feeling, thinking and behaviour are interlinked.

The examples of being hooked by difficult thoughts and feelings;

- One moment, you might be playing with children……and the next moment, you might be hooked by difficult thoughts and feelings.

- One moment, you might be enjoying sharing a meal…… and the next moment, you might be hooked by angry thoughts and feelings. You may feel as if you are being pulled away by anger, even if you are still there.

So, these difficult thoughts and feelings "hook" us and pull us away from our VALUES.

Values are your deepest desires for the sort of person you want to be, how you want to treat yourself and others and the world around you.

For example, if you are a youth or if you have responsibilities - what kind of person do you want to be?

- Loving,
- Wise
- Attentive
- Committed
- Persistent
- Responsible
- Calm
- Caring
- Protective
- Courageous

In stressful situations, difficult thoughts and feeling shook us, and we are pulled away from our values.

Our behavior changes when we get hooked. We often start doing things that make our lives worse.

- We might get into fights, arguments, or disagreements. Or
- We might withdraw and stay away from people we love. Or
- We might spend a lot of time lying in bed.

We call these behaviors "AWAY MOVES" because when we act this way, we are moving AWAY from our values.

So, first you learn how to focus, engage, and pay attention better. When we are stressed, we find it hard to engage in life.

When you give your full attention to any activity, we say you are "engaged" with it. But when hooked by thoughts or feelings, you are "disengaged" or "distracted".

When you give your full attention to any activity, we say you are "focused".

But when hooked by thoughts or feelings, you are unfocused.

And when we do things in an unfocused way, we often do them poorly, or are unable to enjoy the activity and feel dissatisfied.

So, if we can learn to be more engaged and focus better, then we will handle stress better. For example, we will find our relationships with others more satisfying. And we will be able to do important things much better.

There are many ways to practice engaging in life or focusing on what you are doing. We can practice these skills with any activity we do. For example, if we are drinking tea or coffee, we can focus our full attention on it.

- We notice the drink with curiosity, as if you have never encountered such a drink before.
- We notice its color.
- We savor the smell of it.
- We sip it SLOWLY.
- Let it sit on our tongue, feel it on our teeth and relish the taste.
- Drink it as slowly as possible, savoring the taste, noticing the temperature.
- We notice the movements of our throat as we swallow.

- We notice the taste fading from our tongue, as we swallow.
- And we drink each mouthful in the same way: slowly, noticing and relishing.
- And whenever we get hooked by thoughts and feelings …refocus on the drink.
- Think, what other activities we could use to practice engaging or focusing.

- We could practice while talking to family or friends. Notice what others are saying, their tones of voice and their facial expressions. Give them our full attention.
- We can practice this while playing a game or doing some other activity with children, like teaching them to read. We simply give our full attention to the children and to the game.
- We could practice this while washing, cooking or doing chores. We simply give our full attention to the activity.

And whenever we notice we are getting hooked…unhook by refocusing and engaging in what we are doing.

However, this is possible if the bad thoughts and feelings are not so strong, but sometimes our bad thoughts and feelings are so strong that they are like emotional storms – they hook us and overpower us. In such situations "Engaging and focusing" will not help – we need to Ground ourselves to be safe – till the storm passes away.

Imagine you are high in a tree when a storm begins. Would you want to stay in the tree?

While you are in the tree, you are in great danger! You need to get down to the ground as quickly as possible! You are much safer on the ground.

So, we need to "ground ourselves", when our emotional storms appear, through engaging with the world around us and focusing on what we are doing.

The first step is to NOTICE how you are feeling and what you are thinking.

Next, SLOW DOWN and CONNECT with your body.

- Slow your breathing. Empty your lungs completely.
- Then let them refill as slowly as possible.
- Slowly press your feet into the floor.
- Slowly stretch your arms, or slowly press your hands together.

The next step in grounding is to REFOCUS on the world around you.

- Notice where you are.
- What are five things you can see?
- What are three or four things you can hear?
- Breathe the air. What can you smell?
- Notice where you are and what you are doing.
- Touch your knees, or the surface beneath you, or any object you can reach. Notice what it feels like under your fingers.

Grounding does not make your emotional storms disappear. It just keeps you safe, until the storm passes. Some storms last for a long time. Others pass quickly.

The purpose of the unhooking and grounding exercises is to help you" engage" in life. For example, to help you, give your full attention to family and friends. It is also to help you move towards your values; to help you behave more like the kind of person you want to be. And to help you focus on what you are doing, so you can do it well.

When you pay attention to and engage fully in any activity you may also find it more satisfying. Remember they are not supposed to get rid of your anger, fear or sadness.

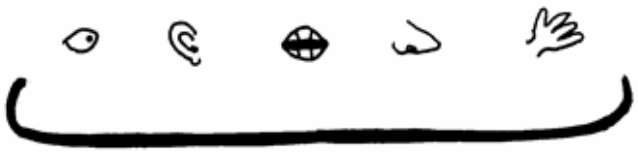
When we engage in life, pay attention to others, focus on what we're doing and live by our values, we manage stress much better.

(Repeat)

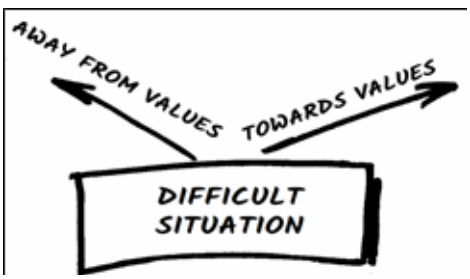
First, NOTICE how you are feeling and what you are thinking.

Then, SLOW DOWN and CONNECT with your body. Slowly breathe out. Slowly stretch. Slowly push your feet into the floor.

Now REFOCUS on the world around you. Pay attention with curiosity to what you can … See, Hear, Taste, Smell and Touch



Now have a good stretch. Engage with the world. Notice where you are, who is with you and what you are doing. Take a moment to acknowledge that each time you practice this. Because these skills help you to engage, focus and unhook from difficult thoughts and feelings – so that you can move towards your values. You can practice these skills anytime and anywhere as a routine.



TOOL 2: UNHOOKING

When we get hooked by difficult thoughts and feelings, we tend to make "away moves" – moving away from our values.

- We might get into fights, arguments, or disagreements. Or
- We might withdraw and stay away from people we love. Or
- We might spend a lot of time lying in bed. (although the thinking and disturbing, self doesn't cease)

SO, we need to learn to unhook ourselves from difficult thoughts and feelings. We always want these difficult thought and feelings to go away. But is it realistic? –

- Can we burn them like rubbish?
- Can we lock them and hide them away?
- Can we run off and leave them behind? – You may think of many other ways you have tried to get rid of these thoughts and feelings. Most people often try some of these strategies.

o Yelling, Trying not to think about it, Avoiding people ,places or situations, staying in bed, isolating yourself, giving up ,Alcohol Tobacco, Illicit drugs, Starting arguments, Blaming or criticizing oneself, etc.

o Many of these ways might make these thoughts and feelings go away for some time (never permanently), many of these pull away from your values.

So whenever you get difficult thoughts and feelings, instead of trying to push them away, you STOP struggling with them. Whenever you get hooked – you UNHOOK yourself.

The first two steps in unhooking are –

1. Noticing, and 2. Naming

First you NOTICE that a thought or feeling has hooked you. Then you NAME it. To name it,

you silently say to yourself something like…Here is tightness in my chest. Here is pressure in my forehead. Here is painful memory. Here are fears about the future. Here is a difficult though about the past. Here is anger; here is difficult thought about my family.

SO NAMING begins by silently saying – "Here is thought" or Here is a "feeling".

However, if we then add a phrase "I notice" – (I notice here is a heaviness in my chest……I notice here is a painful memory…..I notice here is anger.), we find it unhooks a bit more. This is because thoughts and feelings hook us when we are "unaware" of them.

The next step is to REFOCUS on what you are doing – whether you are cooking, or eating, or playing or washing, or chatting with friends – and to ENGAGE fully in that activity; to PAYFULL ATTENTION to whoever is with you and whatever you are doing.

So, to unhook from thoughts and feelings…

1. NOTICE YOUR DIFFICULT THOUGHTS AND FEELINGS

2. NAME THETHOUGHTSAND FEELINGS (SILENTLY).

3. REFOCUS ON WHAT YOU ARE DOING.

The more you practice this, the better you will get. Every time you notice that you have been hooked, run through these steps.

Tool 3- Acting on Values:

Choose the values that are most important to you, for example:

- being kind and caring
- being helpful
- being brave
- being hardworking.

You get to decide which values are most important to you! Then pick one small way that

you can act according to these values in the next week. What will you do? What will you say? Even tiny actions matter!

Remember that there are three approaches to any difficult situation:

1. LEAVE
2. CHANGE WHAT CAN BE CHANGED, ACCEPT THE PAIN THAT CANNOTBE CHANGED, AND LIVE BY YOUR VALUES
3. GIVE UP AND MOVE AWAY FROM YOUR VALUES.

Tool 4- BEING KIND:

BE KIND. Notice pain in yourself and others and respond with kindness. Unhook from unkind thoughts by NOTICING and NAMING them. Then, try speaking to yourself kindly. If you are kind to yourself, you will have more energy to help others and more motivation to be kind to others, so everyone benefits.

You can also take one of your hands and imagine filling it with kindness. Place this hand gently somewhere on your body where you feel pain. Feel the warmth flowing from your hand into your body. See if you can be kind to yourself through this hand.

Tool 5: MAKING ROOM

Trying to push away difficult thoughts and feelings often does not work very well. So instead, MAKE ROOM for them:

1) NOTICE the difficult thought or feeling with curiosity. Focus your attention on it. Imagine the painful feeling as an object, and notice its size, shape, color and temperature.

2) NAME the difficult thought or feeling. For example:

"Here is a difficult feeling".

"Here is a difficult thought about the past".

"I notice here is sadness".

"I notice here is a thought that I am weak."

3) Allow the painful feeling or thought to come and go like the weather. As you breathe, imagine your breath flowing into and around your pain to make room for it. Instead of fighting with the thought or feeling, allow it to move through you, just like the weather moves through the sky. If you are not fighting with the weather, then you will have more time and energy to engage with the world around you and do things that are important to you.

FOCUS ON HEALTHY LIFE STYLE;

- Daily minimum 45 minutes of good physical activity/exercise. Exercise induces endorphins release which promotes feeling of happiness and promotes neuronal activity.
- Adequate sleep with good sleep routines. Adequate sleep generates good neurotransmitters that help deal with stress.

- Dietary habits. Good breakfast, ensuring balanced diet and minimum of caffeine and JUNCS food, Avoid excess caffeine
- Avoid illegal drugs, alcohol, and tobacco

ROLE OF PARENTS

- Parental support has been identified as one of the most effective protective factors during uncontrollably high periods of stress
- Teaching children and adolescents to become resilient
- Developing positive mindset and positive self-talk
- Listen carefully
- Support involvement in sports and other pro-social activities
- Monitor for signs of stress. If present, a consultation with a child and adolescent psychiatrist or other qualified mental health professionals may be helpful

Screening and counseling methods for primary care clinicians:

HEEADSSS (Goldenring and Rosen, 2004)	Home, education, eating, activities, drugs, sexuality, suicide/ depression, and safety
SHADESS (Ginsburg, 2007)	This is a modification of the HEEADSSS interview SHADESS stands for school, home, activities, drugs/substance use, emotions/ depression, sexuality, and safety
BATHE (Lieberman and Stuart, 1999)	This is a brief supportive interviewing technique, adapted from psychotherapy BATHE stands for background, affect, troubling, handling, and empathy

Relaxation techniques

1. Breathing exercises like Yoga, Pranayama
2. Meditation Techniques
3. Chanting and Prayers
4. Guided Imagery
5. Clinical Hypnosis
6. Progressive Muscle Relaxation
7. CBT / REBT
8. PRISM
9. Biofeedback training
10. Autogenic training
11. Interpersonal Therapy
12. Third wave Therapy
13. Mindfulness

The early detection and optimum handling of adolescent stress with persistence, patience and practice with gatekeeper's guidance is protective, proactive and thus imperative. Stress is universal but the way it is tackled varies from person to person.

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Psychopharmacology for Practising Paediatrician

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ABSTRACT: This Article tries to provide a practical overview regarding the use of psychopharmacology for behavioural problems in children and adolescents. The acceptance of education use in child psychiatry has enhanced significantly following the results of several double blind placebo controlled trials which have categorically documented the safety and efficacy of drug treatments for disorders including attention deficit hyperactivity disorder depression anxiety disorders obsessive compulsive disorder psychosis and enuresis. This article tries to focus on the judicious selection and use of psychopharmacology evaluating the risk benefit ratio in the given situation.

BACKGROUND: Mental health conditions account for 16 percent of global burden of disease and injury in persons between 10 to 19 years. The recent National Mental Health Survey has identified that 7.3 percent of children and adolescents between 13 to 17 years suffer from mental health conditions. Overall 8 to 13 percent of children are in need of mental health services.

Common mental health problems in children requiring pharmacological intervention include neuro-developmental disorders including attention deficit hyperactivity disorder (ADHD), externalising disorders including conduct disorders, and internalizing disorders including depressive disorder, anxiety disorders, obsessive compulsive disorder, and psychosis. Pharmacological intervention may be necessary to contain aggressive and self injurious behaviour in children with intellectual developmental disorders and autism spectrum disorders as well.

PHARMACOTHERAPY OF ADHD

ADHD is the commonest behavioural disorder in school going children. Studies say that 5 to 7 percentage of school going children suffer from ADHD requiring intervention. The pharmacotherapy of ADHD includes both stimulant and non stimulant medications. Commonly used stimulant medications include methylphenidate and dextroamphetamine. Out of these methylphenidate is the only one which is available in India. The non stimulant medications available for the treatment of ADHD include atomoxetine, modafinil and clonidine. In severe cases which are not responding to the above mentioned medications low dose of antipsychotics and mood stabilizers can be used as second line treatment.

Methylphenidate which is regarded as the drug of choice for the treatment of ADHD, improves all the 3 symptom domains of the condition including in attention hyperactivity and impulsivity. The mechanism of action of this drug is by enhancing the level of dopamine in the prefrontal cortex as well as by improving the coordination of the functioning of both cerebral hemispheres. Methylphenidate is available as both plain formulation and sustained release formulation. Plain formulation has duration of action of around 4 hours while the sustained release formulation may act up to 8 to 12 hours.

Plain formulation is available as 5 and 10 milligram tablets, while the sustained release formulation is available at doses 18 milligram 36 milligram and 54 milligram. The daily dose of methylphenidate is one milligram per kilogram. It is always better to start at the lowest possible dose explain formulation only in the morning. Depending upon response, the drug dose may be titrated to up to 60 milligrams per day. The commonest adverse effects of methylphenidate include lack of appetite, growth retardation and physical fatigue. Rarely cardiac conduction abnormalities and renal abnormalities can also surface. Before starting a child on methylphenidate that is better to do all the baseline evaluations including ECG and renal function test. FA child is unable to tolerate methylphenidate it is always wise to substitute it with a non stimulant medication.

Among the non stimulant medications and atomoxetin is the most popular one. It's available as 10, 18, 25 and 40 milligram tablets which is best administered daily in the morning after food. Lack of appetite is a common adverse effect seen with atomoxetin also. Sometimes the child may present with mood swings including rare emergence of depressive thoughts as well as suicidal ideas. Any child manifesting with search mood symptoms consequent to the use of atomoxetin, should not be continued on this medication. Atomoxetin improves the level of nor epinephrine and dopamine in the brain thus enhancing attention span.

Modafinil is another drug which is used especially in children with inattention prominent type ADHD in children. It's available as 100 and 200 mg tablets. Starting dose is 50 mg daily morning after food, as is gradually titrated to 200 mg once daily. Adverse effects include insomnia, headache, rashes and mood instability.

Clonidine is an alpha adrenergic agent used to control ADHD in small kids. It's available as 100 microgram tablets. The drug is started at a dose of one-fourth of a tablet thrice daily and is gradually hiked as per clinical requirement. Adverse effects include hypotension and rebound hypertension, especially on sudden stoppage of the drug without tapering the dose.

ANTIDEPRESSANTS:

Antidepressants are used for varied indications including depressive disorder, obsessive compulsive disorder and anxiety disorders in children and adolescents. Commonly used antidepressants include selective serotonin reuptake inhibitors (SSRI's) and serotonin norepinephrine reuptake inhibitors (SNRI's). Some other medications including tricyclic antidepressants (TCA) and Norepinephrine and Specific Serotoninergic antidepressants (NASSA) are also used for specific indications. Among SSRI's fluoxetin, escitalopram, and fluoxamine are approved for use in children and adolescents for depressive disorder and obsessive compulsive disorder.

Fluoxetin is available in 10, 20, 40, 60 mg tablets and liquid formulation with content of 20 mg in 5 ml. Dose for depression is 10-20 mg per day but in OCD a higher dose up to 60 mg per day may be necessary, especially in adolescents.

Escitalopram is available in 5, 10, 20 mg tablets. Dose in depression is 5 to 20 mg per day, but in OCD a higher dose up to 30 mg may be necessary especially among adolescents.

Fluoxamine is available as tablets 25, 50, 100 mg and extended release tablets of 150 mg. In depression dose is 50 to 100 mg per day, but in OCD a higher dose up to 300 mg per day may be indicated.

The Common adverse effects of SSRI's include nausea, vomiting, diarrhoea, headache, insomnia, anxiety and agitation. In persons with susceptibility for bipolar mood disorders, use of SSRI's may sometimes lead to a switch to mania, which is characterised by over talkativeness, excess energy, excess happiness or even violent behaviour.

Tricyclic antidepressants are used more commonly for conditions like nocturnal enuresis and obsessive compulsive disorder. Impramine,

A tricyclic antidepressant is considered to be the drug of choice for nocturnal enuresis. It is administered at a dose of 10 mg and 25 mg at night. Another tricyclic antidepressant amitriptyline is also used in resistant cases of nocturnal enuresis in the same dose. Another tricyclic antidepressant called clomipramine, is considered the gold standard drug for the treatment of obsessive compulsive disorder in adults, but it's not commonly preferred in children because of its adverse effects. The common adverse effects of tricyclic antidepressants include anticholinergic adverse effects like dryness of mouth, constipation, sedation, worsening of glaucoma and cardiac conduction defects. They may also lead to cognitive impairment especially if used on a long term basis.

SNRI's are commonly used in cases of resistant depressive disorder as well as for anxiety disorders with prominent somatic symptoms. The commonly used drugs in this group include venlafaxine, descenlafaxine, duloxetine, milnacipran and levomilnacipran. Out of these venlafaxine and desvenlafaxine are the most commonly used ones. Venlafaxine is used at a dose between 37.5 mg to 150 mg per day. DesvenlafaxineIs used at a dose between 50 to 100 milligrams per day. The common adverse effects include hypertension, nausea, vomiting and gastrointestinal upset. Another major problem with this group of drugs is the discontinuation symptoms which may be prominently present if the medicine is suddenly stopped without tapering. The common discontinuation symptoms include headache, a feeling of electric shock in parts of the body, and sweating. Because of this phenomenon SNRI should never be stopped suddenly they should be tapered slowly before stopping.

ANTIPSYCHOTICS

(Best avoided as a prescription drug by paediatricians)

Antipsychotics are a group of medicines which are used for the treatment of psychotic disorders. These are essentially mental health problems in which the patient is unlikely to have an insight about his own condition. Disorders in this group include schizophrenia and delusional disorder.

In paediatric practice, low dose antipsychotics are also used for conditions including tic disorders, Tourette's syndrome, Attention deficit hyperactivity disorder, and for controlling the behavioural problems in children with mental retardation and autism.

The commonly used antipsychotics in paediatric practice include risperidone, aripiprazole and haloperidol. The dose in which these medicines are used is much lower than the dose used in adult clinical practice. Risperidone is used at a dose ranging front 0.5 mg to 2 mg per day. Haloperidol is used in a dose ranging from 0.25 mg to 3 mg per day, and aripiprazole from 2 mg to 5 mg per day . The most common adverse effects include extra-pyramidal side effects including acute dystonia, akathisia, drug induced parkinsonism and tardive dyskinesia. In small children majors adverse effects including oculogyric crisis and laryngeal dystonia may be a cause of concern while using antipsychotics. use of the lowest dose for the shortest period of time is what is generally advised while prescribing antipsychotics for paediatric practice. Medicines like risperidone and haloperidol can produce elevated levels of prolactin in adolescence leading to clinical manifestations including amenorrhea and galactorrhea in females and sexual dysfunction among male adolescents. But I repeat pre sold which is considered as a dopamine serotonin system stabiliser infact reduces the level of prolactin and so is rarely associated with hyper sexual behaviour especially in children with cognitive impairment.

MOOD STABILIZERS:

Bipolar mood disorders are seen among adolescents and may require treatment with a class of medicines termed as mood stabilizers. Commonly used mood stabilizers include lithium,

sodiumvalproate, carbamazepine, oxcarbazepine and lamotrigine. Do each of these medicines are very effective for the treatment of mood disorders they also have adverse effects which may be of concern unless prescribed judiciously.

For example lithium which is the first discovered mode stabilizer is a drug with excellent anti suicidal properties and so maybe of great benefit in bipolar disorder among adolescents with suicidal tendency. But at the same time we should understand that lithium is a drug with narrow therapeutic window of between 0.6 to 1.2 milliequivalents per litre. While prescribing lithium it is most essential to do baseline investigations including renal function test and ECG As lithium should be best avoided in people with cardiac conduction defects or renal failure. Even after starting lithium periodic estimation of serum lithium levels should be done to ensure that the serum level of the medicine is within the therapeutic window and does not go into toxicity levels. Lithium toxicity which is essentially considered as a serum level of above 1.5 milli equivalents per litre Is a medical emergency which requires immediate management. Symptoms of this condition may include woods prabhas nephrogenic diabetes insipidus seizures and even delirium. Immediate withholding of lithium and supportive treatment with intravenous fluids is necessary at this point of time. If serum lithium level goes beyond 4 milliequivalents per litter haemodialysis is indicated. Quite a lot of cosmetic adverse effects including acne and skin lesions are possible in adolescence put on lithium. The usual dose of lithium in children and adolescents may reach from 300 mg to 900 mg per day in divided doses.

Another commonly used mood stabilizer is sodium valproate. It's more commonly used in cases of dysphoric or irritable mania. It's available as 200,300,400,500,600 mg Tablets as well as liquid formulations with content of 200 milligram in 5 ml. Often it's given at a high loading dose of 20 to 30 mg per kg. In case of mania though considered to be a very effective mode stabilizer, valproate has got adverse effects including weight gain, liver toxicity, Pancreatitis as well as cosmetic issues including rashes and hair loss. Because of its teratogenic impact it's generally discouraged for use among adolescent females of the reproductive age.

A 3rd mode stabilizer which is commonly used is carbamazepine. do identified as an anti epileptic which is considered the drug of choice for partial seizures, this drug is also effective in controlling mood disorders and impulsive outburst in emotionally unstable personality disorders. It's available as 200, 300, 400 mg tablets. One of the common and doors effects which could be a major cause of concern is the probability of producing benign rashes which may progress to life threatening complications like Steven Johnson syndrome if ignored. The patient and bystanders need to be educated to watch 4 itching and skin rash while using this molecule. The congeners of carbamazepine,Includingoxcarbazepine and eslicarbazepine also have the propensity to produce rash and Steven Johnson syndrome.

Another anti epileptic drug which is widely used nowadays as a mood stabilizer is lamotrigine. Available as 25, 50 and 100 mg tablets, this molecule should be started at the lowest possible dose and slowly titrated to the optimum possible dose. Do considered safe by several counts including metabolic and systemic adverse effects, lamotrigine also has the potential to produce rash and Steven Johnson syndrome even though at a frequency much less than carbamazepine and its congeners.

BENZODIAZEPINE IN PAEDIATRIC PRACTICE

Benzodizepins are the drugs which produce immediate relief of anxiety in anxiety disorders and hence are used widely among all age groups. But unfortunately this is the group of drugs in psychiatry which is notorious to produce dependence as well. One needs to be very cautious while using benzodiazepines in the paediatric population. Benzodiazepines

may be used in severe cases of panic disorder, social anxiety disorder and phobias, which are not responding to psychological treatments. But it is better to use short acting benzodiazepines for the shortest period of time. Medications like lorazepam at a dose of 1 to 2 mg per day, clonazepam 0.25 mg to 0.5 mg per day, or etizolam 0.5 mg to 1 mg per day, maybe preferred over long acting benzodiazepines like nitrazepam , diazepam or alprazolam which are more likely to produce dependence. Whenever a benzodiazepine is prescribed for paediatric population please make sure that you review the patient after one week and taper the medicine at the earliest possible date.

BETA BLOCKERS AS ANXIOLYTICS

Many children and adolescents do present to a paediatrician with symptoms suggestive of performance anxiety, especially related to exams, stage performances and even interviews. In such scenarios it is wise to opt for an anxiolytic which is less likely to have sedative properties. Since most of the benzodiazepines have sedative properties, they may be best avoided in such scenarios during daytime. The beta blocker propranolol in low doses may be an excellent option in such cases. Doses as low as 10 milligrams per day may be enough to counter performance anxiety during daytime. In case the child has to go through a long term performance or examination lasting from morning till evening giving a long acting formulation of propranolol probably 20 mg in the morning may be sufficient. But propranolol should be avoided in people with previous history of asthma or brocho-constriction as well as in case of children with hypotension and cardiac disorders. In most other cases propranolol may be an excellent choice for a day time anxiolytic.

CRITERIA FOR PROMPT REFERRAL TO A PSYCHIATRIST

A common doubts places raised by quite a lot of practising pediatricians raise is regarding when a patient should be referred to a psychiatrist. In the modern day context of medico legal problems and defensive practice, it's always better to have clear cut guidelines regarding when a child or adolescent should be referred to psychiatrist. The following situations may warrant an immediate referral of a child or adolescent with behavioural problems to a psychiatrist.

- Severe suicidal ideations as a result of severe mood disorders, psychotic disorders, Substance use disorders and even personality disorders
- Severe psychotic symptoms including delusions / hallucinations /violent behaviour
- Severe mania as these cases may require inpatient care as well as expert management of violent behaviour
- Severe substance use disorder including poly substance use disorders needing in depth evaluation of the mental state including assessment of temperament and personality traits
- Resistant depression or anxiety, which is not responding to an adequate trial of 2 antidepressants
- Obsessive compulsive disorder with poor insight or delusional beliefs
- Children and adolescence with chronic unexplained physical symptoms, or intense and traumatic dissociative symptoms including intractable pseudo seizures, somatisation, and chronic pain

Caution may be exercised while using certain psychotropic medications especially medicines which require meticulous monitoring like lithium. It's always advisable that a paediatrician refrains from starting lithium to a patient. Follow up treatment of persons on lithium also is better done in consultation with a psychiatrist to avoid unexpected adverse effects.

Category of medications	Dose	Precautions
Stimulants:		
Methyl phenidate	5,10,20, mg	Weight loss
Methyl phenidate sustained release	18,36,54 mg	
Non Stimulants:		
Atomoxetin	10,18,25,40 mg	Weight loss,mood instability
Modafinil	50,100,200 mg	Headache,weight loss
Clonidine	0.1mg	Hypotension,rebound hypertension
Antidepressants :		
SSRI:		
Fluoxetine	Liquid (20mg/5ml)	Gastritis,Hyponatremia
	10,20 mg	
Escitalopram	5,10,20 mg	
Fluvoxamine	50,100,150 mg	
SNRI:		
Venlafaxine	37.5,75 mg	Hypertension
Desvenlafaxine	50,100 mg	Withdrawal symptoms
Tricyclics:		
Imipramine	10,25,50,75 mg	Anticholinergic symptoms
Amitryptiline	10,25,50,75 mg	
Clomipramine	25,50,75 mg	
Antipsychotics:		
Atypical		
Risperidone	0.5,1,2,3,4 mg	Increased prolactin
Aripiprazole	2,2.5,5,10 mg	Akathesia
Typical		
Haloperidol	0.25,1.3,5,10 mg	Extra pyramidal symptoms

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Behavior modification and timely referrals for teens at risk

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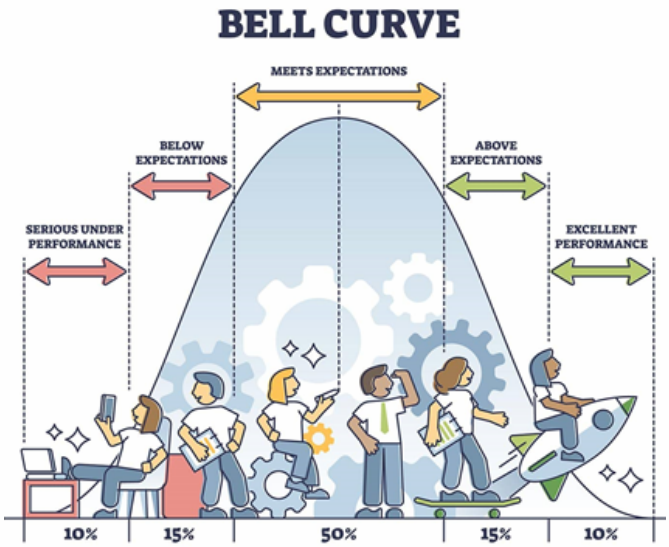
Introduction:

Adolescence is a period of three "Es", expanding (in size and knowledge), experiencing (many good and at times bad incidents) and experimenting (internet, drugs, evolving sexual urges, unsafe driving and many more). Most of us have gone through this golden epoch of life which we tend to revisit during our school and college alumni gatherings. The key role of pediatricians as primary mental health professionals lies in the fact that a child's individual's core belief system and basic philosophies that last throughout life take shape during this decisive period. The physical energy and intelligence also persist at the highest peak as demonstrated by our idols like Chatrapati Shivajee, Sant Dnyaneshwar, Sachin Tendulkar, Pt. Bhimsen Joshi, Ustad Zakir Hussain, Lata Mangeshkar, Veer Sawarkar and countless more.

At times, this implausible physical and mental energy takes a physically, mentally and socially nasty turn for self and others. The pediatricians with whom children and parents are contented, have an immense responsibility to detect and "filter out" these vulnerable teens (actually increasing in number nowadays) who can be brought back to their priceless potentials and fortune. It is a fact that more than 50% adult mental health disorders and emotional disturbances have their origins before 14 years of age. A small piece of commitment and mutual aid from family and school would be delicious. Only a few teenagers luckily need referrals (see later). Another small group is wise innately and may not need any form of help at all. But a vast majority of children's destiny is groomed and shaped by influences (good and bad) from family, teachers, media, peers and environmental havocs etc as shown in following normal distribution curve:

(With due acknowledgement to: https://www.simplypsychology.org/normal-distribution.html)

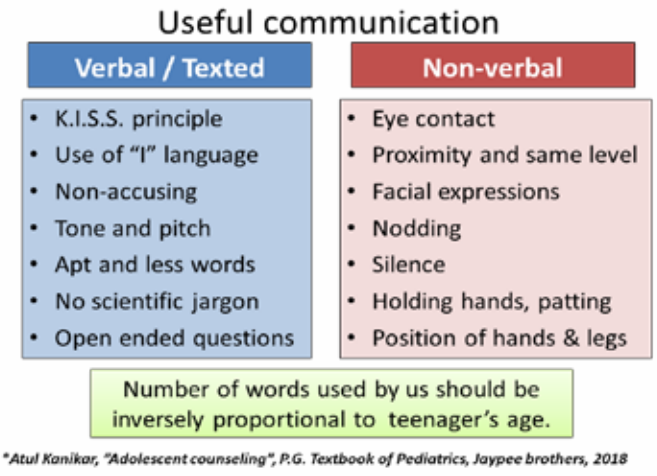


This diagram is applicable not only for academic or career excellence but also applies equally to all facets of life. The earlier we accept our strengths and weaknesses, the better. Following article aims at successfully addressing teenager's concerns [ASAP] about the hindrances in enabling him/her to achieve his/her intended goals. To accomplish this, which is critical and tricky but NOT unattainable, all of us need to understand, inculcate and practice

"The fundamental counseling skills". A separate mutually suitable timing, uninterrupted cozy chat, learnt protocols, full confidentiality, willingness to unreservedly accept the 'sporadic unexpected' and a ton of gusto is all that is needed. This is slightly difficult but not impossible and quite rewarding in a long run.

Most of the parents with all their fretfulness and children with negativism and skepticism attend our clinics. Being trained at the medical colleges and 'proud' teachers, sounding like a parent we tend to moralize the already uninterested and annoyed teenager and this is what creates the breach. Thus the fruitful communication proficiency depicted below MUST be practiced routinely to enable the teenager to vent-out.

Figure 1: Communicati on skills in office practice



**Atul Kanikar, "Adolescent counseling", P.G. Textbook of Pediatrics, Jaypee brothers, 2018*

(K.I.S.S. stands for "Keep it short and simple)

Routinely we see many teenagers brought usually by the parents who reveal (in one to one talk) some form of discomfort, annoyance or stress. Once a good rapport trust is established with the child who feels understood, then things become easier. Any disturbed teenager now will vent out most of the chaotic emotional garbage and the self talk. We need to detect the unrealistic and irrational beliefs derived from the 'self talk' at the moment of adversity, causing such severe emotional outbursts and at times high risk behaviors. To achieve this, the "absolutistic" musts, rigid demands, awful thoughts and depreciation of self/others/the world are highlighted.

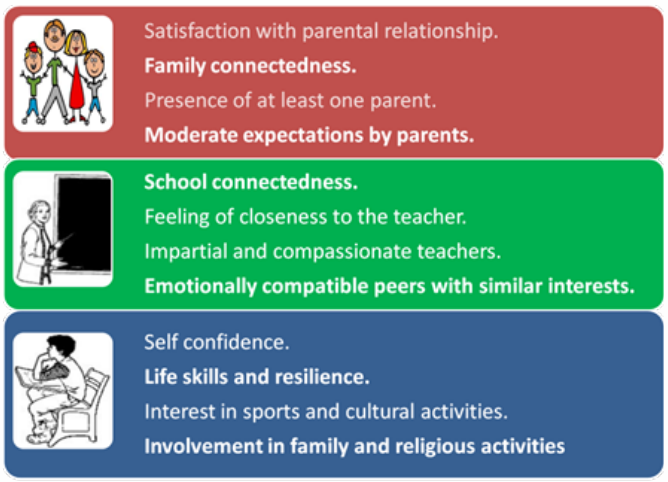
The next step is to question/dispute these irrational beliefs (ideas) in a friendly manner. In most cases, the teenager "tames" down and develops a new belief system that helps in his/her goal attainment which is our primary target. Teenagers covet for a listening ear and empathetic non-judgmental senior person and a pediatrician being known to the teenager and the family naturally becomes the right choice.

A majority of teens on the edge can also be guided by an easy, effective and enlightening process called as psycho-education (See later). The above mentioned procedures are quite suitable for teenagers because these are target specific and act like a dart. The time required is also not much which suits us and the busy adolescent. Teenagers are sharp and love intellectual discussions such as disputation (open ended questioning). Anxiety, guilt and depression which are common in adolescence are best manageable with counseling and psycho-education. Moreover, the lasting effect is on core beliefs and basic philosophies which need to be productive, peaceful, protective and pleasant.

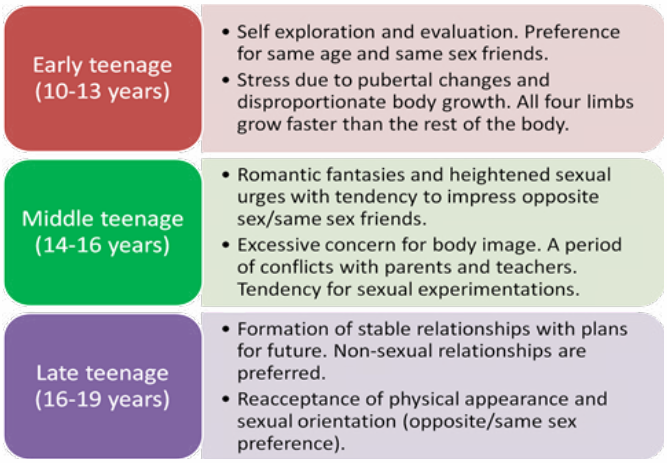
The following chart depicts the model process of behavior modification with teenager's participation:

An assurance of patience, persistence and practice is mandatory for not just 'feeling better' but for 'getting better'. The first visit of the teenager could be the last; hence we should take this as an opportunity to understand with full empathy in a non-judgmental way with ensured privacy to deliver the scientific and an 'easy to practice' health knowledge which is acceptable and doable. A set of charts or a laptop with power point slides can be quite handy. Collection of various pamphlets, flow charts, posters etc can make a lasting impact for behavior modification for a teenager and the parents as well. Most of the "confused" adolescents and baffled parents visit us hopefully for genuine information regarding health. Following two pictures do make things clear for both pertaining to psychosocial development and brain maturation. The principal aim is to self analyze protective factors for every family member and diminish the conflicts, the foremost cause for teen rebel and high risk behaviors.

Protective factors for adolescents:



While addressing an emotionally disturbed, frustrated and confused adolescent or a scared parent the following chart depicting the psychosocial developmental characteristics of a teenager can be a great tool.

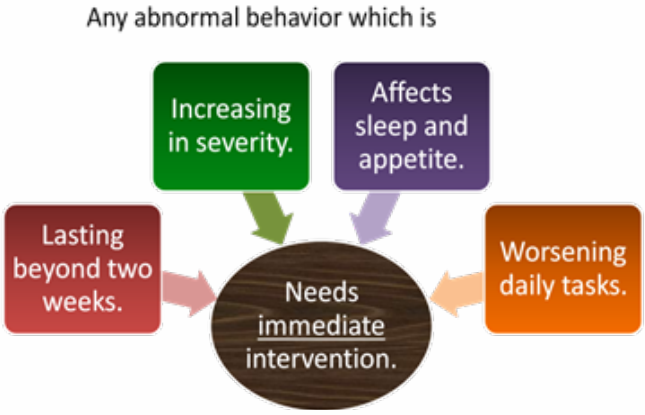


Above diagram shown both to a teenager and parents can make them understand the NATURAL cause for family conflicts and vulnerability during adolescence. Most of the confused adolescents and their stressed up parents are thus empowered to understand the so called turmoil of teenage. Our profession of being the pediatricians, who are presumed to look after a child from birth to eighteen years, actually begins here. A child with other issues like academic stress, media harassment, evolving sexual zest, disturbed family milieu, peer pressure, academic backlog, body image concerns, relationship issues, contraception confusion deserves a little different approach and that can make us the real adolescent care pediatrician. A genuine interest, listening ear, proper training, patience and commitment are all that is needed.

A small number of teenagers need prompt referrals to endocrinologists, dermatologists, E.N.T. surgeons, speech therapist, career counselors / educationists, marriage counselors and even psychiatrists. At times help from the local cyber crime branch may be necessary.

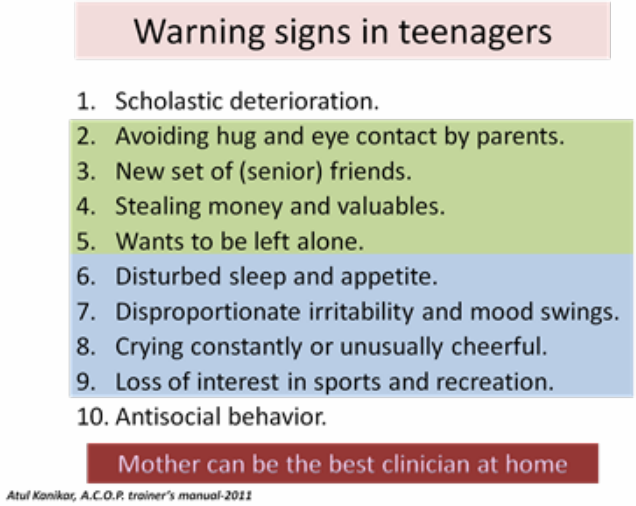
The pediatrician should be a bridge/buffer/ negotiator during this critical process because the family is comfortable with us. Recently the social stigma against visiting the mental health professionals is fortunately declining to our benefit and we should capitalize on that in a professional and scientific manner. A team work would accomplish this for good. In our daily

practice the following dictum can be very helpful in referring teens with special and immediate needs:



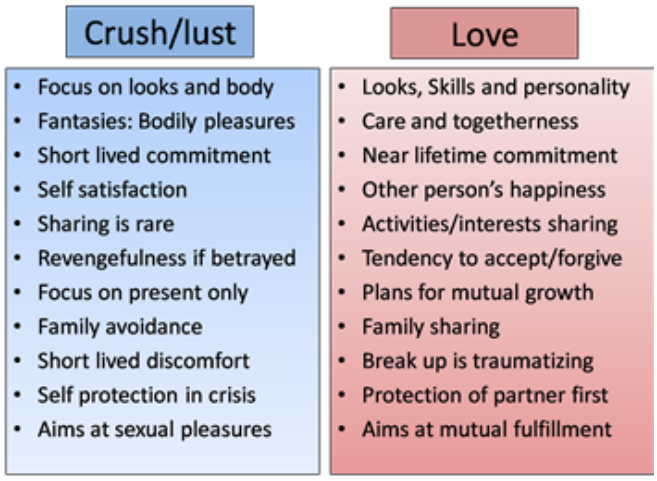
Indications for prompt referrals in adolescent practice are:

- Severe depression, Suicidal ideation/attempt
- Grade 3 substance abuse (active search for opportunities to consume drugs)
- Involvement in antisocial activity/crime
- No improvement after two sessions of psycho-education and counseling
- Thought disorder, bipolar disorder and personality disorder



The above symptoms point out towards high risk behaviors and conditions like substance abuse, depression or conduct disorders which have been increasing / worsened recently after Covid lockdown syndrome and excess social media exposure. The parents, teachers and the peer group can be trained to identify any such symptoms and obtain help early to avoid misery and morbidity in a growing child who has become vulnerable to external influences more than the protective factors.

Model posters for Psycho-education and anticipatory guidance in office practice:



Picture credit and acknowledgements to: WHO India and Felix Matthew (for self control)

Atul Kanikar, Parenting in the Digital Era, I.A.P. action plan, Mission "Kishore Uday", 2018-19

Thus, it is not the amount but the quality of time that is vital in bringing out a desirable change and this is applicable to families as well as a pediatrician's office.

Suggested reading:

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Essentials of POSCO Act for practising paediatricians

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POSCO (prevention of child sexual offences) act 2012 is a comprehensive, gender neutral law, which fairly covers all sexual offences or assaults against children below 18 years age and was further amended in 2019 by enhancing the punishment by incorporating PSA (penetrative sexual acts) and child pornography under it, however only the tip of the iceberg comes to light.

Term 'aggravated' is being used if a child (victim) is mentally challenged or the perpetrator is in a position of authority or abuses his position to commit the crime or violates the law. Consequently punishment under POSCO act varies from a minimum of 3 yrs. to life imprisonment plus penalty or fine depending on the type of offence committed and fine will be awarded as compensation to the child or for his or her rehabilitation.

Definition of child sexual assault (CSA) or offence:

"The involvement of a child in sexual activity, that he or she does not fully comprehend, is unable to give informed consent to or for which the child is developmentally not prepared and cannot give consent or that violates the laws or social taboos of the society". Majority of the offenders are a well-known to child or relatives or even elder children, care takers, persons in position or authority. Majority of CSAs are committed in institutions, hostels, foster homes and child care centres, schools. Children may not disclose, as they are unable to speak or communicate or understand or may be due to fear or pressure or might think it is normal.

Vulnerable (targeted) children for CSA:

Children of single parents, broken homes, unaccompanied, those in foster homes, adopted ones, differently able, poverty ridden, parents with mental illnesses, socially isolated and parents with alcohol and drug dependency.

Spectrum of offences under POSCO:

1. Penetrative sexual assault (section 3)
2. Aggravated penetrative sexual act (sec.5)
3. Sexual act (sec. 7)
4. Aggravated sexual act (sec.9)
5. Sexual harassment of the child (sec.13)
6. Use of child for pornography

Key Features or Basic Ethics of POSCO:

- Mandatory reporting & recording
- False reporting
- Emergency Medical care
- Care and Protection of child
- Child Friendly Procedure (interviewing and examining the child in the presence of the person with whom the child feels comfortable and relaxed)
- Presumption

- Special Courts provision
- Compensation (Child below 18 Years and provides punishment for the offender, Abettor and for not reporting.)

A paediatrician will become aware of CSA, when the child was brought by the parents, if child presents itself, during the routine check-up or when brought by police board, child welfare court (CWC).

Roles and Responsibilities of a paediatrician

As a clinician (any RMP authorized by the hospital, Government or private, in presence of a staff or assistant trained in handling CSAs) has to provide emergency care, obtain medical history from child, conduct a detailed medical examination, provide treatment and prophylaxis, mental health evaluation (for anxiety, phobia, agitation, depression, obsession, isolation, silence etc). A caring attitude and full medical and psychological support is mandatory.

The forensic expert has to collect evidence (either immediately or later, using POSCO kit or rape victim kit (which contains a white sheet of paper, 2 or 3 empty glass vials with lid, cotton swab with a with large and 2 small paper envelopes, a sterile bottle, comb, small brush) this kit is available on request and its transport has to be done by a person trained in handling CSA cases. Usually we can get within 10-15 hrs-live sperms, later at 48-72 hrs-dead sperms, nails, hair etc and then attend to any injury, STD, pregnancy, mental health issues, do developmental assessment (age, SMR), Forensic interviewing assisting the court as witness in recording child statement and in investigations.

Advocacy and Counselling

Involving all the concerned (child, family, relatives etc) in the best interest of the child- to be done leisurely, friendly manner and without force or coercion also involves sex education, training of all the stake holders, creating awareness.

Consent and Confidentiality

Parents or relatives or guardians can give consent, if parents or child refuses to give consent then the police or CWC (child welfare committee) or court or any legal authority has to be informed and documented. Child between12-18 years can give consent after proper counselling. Confidentiality has to be maintained and even the names should not be disclosed either to public or press or even to investigating officer.

Reporting:

- Any person who is aware, comes to know, suspects can report
- Report to the nearest special juvenile police unit or police station or CWC or juvenile justice board or court
- Report immediately with in 24 hrs or later also, if you are in doubt then also report in good intention
- Report in order to prevent secondary victimisation

This is compulsory by law and not reporting is punishable with a fine and imprisonment.

Referral services or a referral policy is very important and should be a team work by paediatricians, obstetrician and Gynaecologist, Psychiatrists and Child psychologists including professional Counsellors who need to be well aware of POSCO Act with its proper applications and provisions

Mental health issues:

Immediate: Shock, fear, self-blame, stress, confusion social withdrawal, and somatisation if not addressed well may make victims as perpetrators.

Long term: effects such as PTSD, depression, anxiety disorders, eating behaviours, sexual dysfunction, suicidal behaviour, and alcohol and drug abuse may lead to Stock home syndrome. Early identification of these and proper treatment

is vital.

Physical health issues where in high index of suspicion is required are physical injury to genitalia and related complications, sexually transmitted infections including HIV, Pregnancy and child birth related problems.

Red Flag signs of CSA: pain or itching in genital area, difficulty in walking, sitting, pain during defecation or micturition etc

Important points (9- Pearls) to remember in Emergency Medical Care of POSCO

1. Information received by SJPU/Police that offence committed under POSCO
2. Offences come under sec 3,5,7,9 or Child need of urgent medical care & protection
3. Emergency medical care within 24 hours
4. Child must be taken to nearest medical care facility
5. Legal or magisterial requisition or document can be demanded by doctor as a prerequisite for providing care
6. Privacy of the child to be respected, consent to be taken, care to be provided in presence of parent/Guardian/person child trusts.
7. If parent or others not available conduct examination in presence of a woman nominated by the head of the medical facility.
8. Where victim is a girl, examination must be done by a woman doctor.
9. Necessary treatment for injuries, exposure to STIs, provision for Covid 19 test, possible pregnancy to be ensured and reference for mental or psychological counselling can be made.

To summarise:

- Trust the child about his/her complaints
- Do not insist on FIR
- Our main goal is to conduct medical examination, treatment and collecting evidence
- In majority of the cases medical examination yields very minimal findings
- Reporting is mandatory
- Always provide free treatment
- Try to avoid secondary victimisation
- Assist other stake holders also.

Here are few case scenarios which come under POSCO and self-exercise to solve them.

Case 1 : A 12 year old sweet boy staying in the boarding school prefers to visit the toilet ONLY after ensuring that a senior is not around. He can't focus on academics and gets startled often and now wants go home.

Definitely here boy is suspected to be sexually assaulted and facing sexual threat by his senior who is a perpetrator and surely comes under POSCO act irrespective of him (perpetrator) being minor less than 18 years or above. If below 18 punishment as per law will be awarded by Juvenile justice board otherwise 3 years imprisonment and fine will be awarded for the crime, if it is a penetrative sexual assault,7 years with fine(section 3 or 5).

Boy being mentally suffering needs counselling, reassurance, provision of safety and follow up plus proper treatment for any infection and or injury. Boarding School authorities need to take precautionary, preventive methods or else they are also liable for punishment as abettors of crime.

Case 2 : A 15-year-old girl visits a paediatrician's clinic for undue vomiting and missed periods, on empathetic and non-judgmental interviewing she confesses about physical intimacy (some times without protection) with her boyfriend on several

occasions. She demands that parents must not know about it.

Since the girl here is below 18 years and there is a strong possibility of she being pregnant as a result of consensual physical intimacy, case still covered under Postcombat if the boy is above 18 yrs. He is liable to be punished or if below 18 yrs still to be tried by juvenile justice board. But still as there was no complaint lodged by the girl or any party, paediatrician should inform the police and CWC (child welfare committee), parents have to resolve the issue.

As for the confidentiality issue, the girl need to be counselled regarding complications of pregnancy,STIs,legal issues and safe sex(contraception) with the available treatment options.

Case-3 : A 9 year old girl brought by parents with frequent voiding, bed wetting, lip smacking and numerous hand washing compulsive behaviour. She also had sad mood with excessively distrustful looks. On clinical examination there are chemical rashes over palms and perineum, after thorough and consoling interaction, the child revealed that her grandfather makes her sit on his lap quite often and fondles her to demonstrate his love.

In this case 3 main issues need to be considered, first case being under POSCO act the culprit is a known person (grandfather) causing sexual assault comes under aggravated sexual act (as per the amendment to POSCO-2019),therefore police complaint is mandatory.

Secondly secondary victimisation (stigma, social isolation, guilt feeling etc) needs to be addressed.

Thirdly child and parents need proper counselling and child requires good psychiatric/ behavioural intervention.

Case 4 : A 15 year old girl is recently threatened by her online friend. The person has her revealing pictures (probably morphed) and demands financial or physical intimacy rewards, else he or she would make them viral on the social media.

As per 2019 amendment to POSCO act, any online pornographic acts involving children such as suggestive nature, threatening or abusing, using morphed/revealing pictures of a boy or a girl for monitory or sexual gains attracts a punishment of imprisonment up to 3 years or more & a fine. Additionally, child/parents need counselling regarding proper handling of social media and also child needs psychiatric evaluation. The local cyber crime branch (Toll free number is 1930) must be immediately involved in this case.

Thus the awareness and practice of the POCSO Act is not only crucial but mandatory for all paediatricians.

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Trends in substance abuse in adolescence

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Introduction

It is estimated that 70-90% of substance abuse in adults has its onset in adolescence. Substance abuse is increasingly common in adolescents today and is no longer restricted to tobacco and alcohol. Adolescent substance use is more common among adolescents who are out of school, especially if they are working and thus have an income and opportunity. It is common if there are family problems and substance use at home.

On May 13, 2023 a ship carrying 2500 kg of crystal methamphetamine valued at an astounding Rs 15,000 crores was captured by a joint team of the Narcotics Control Bureau and the Navy. It was the biggest ever drug seizure in Indian history. This underlined a major trend in substance abuse in India: the increasing use of illicit drugs. This capture was the outcome of a major initiative named 'Operation Samudragupta' to prevent drug trafficking from Pakistan and Afghanistan to India by the sea route, which had already intercepted 3000 kg of Methamphetamine, 500 kg of Heroin and 529 kg of hashish since its inception in January 2021. News of large seizures of cannabis, MDMA and other illicit drugs has become routine nowadays.

Statistics can be misleading!

What is the magnitude of substance abuse in India? To answer this question, the Ministry of Social Justice and Empowerment (MoSJE) sanctioned a systematic sample survey of persons aged 10-75 years, which was conducted in 2018 by trained personnel in around 150,000 households from every state and union territory of India. This was followed by a respondent-driven sample of 72,642 persons with drug dependence (1).

Table 1: Prevalence of drug use at least once in the last year

	Adults (18-75yr) (%)	Adolescents (10-18 yr) (%)
Alcohol	17.1	1.3
Cannabis	3.3	0.9
Opioids	2.1	1.8
Inhalants	0.6	1.2
Cocaine	0.1	
Amphetamine	0.2	
Hallucinogens	0.12	
Injectables	0.08	

Why do these statistics give the impression that substance abuse is rare among Indian adolescents?

a. The statistics for adolescents are an average of use between 10 and 18 years. Use increases dramatically as adolescence progresses, and the statistics for 18-year-olds would be much higher than those for 10-year-olds. The USA has for decades maintained detailed statistics of substance use in high school students (2). Their figures reveal that in 2018 alcohol use at least once a year increased from 19% in 8th graders

(13-14 years old) to 52% in 12th graders (17-18 years). Cannabis use was 11% in eighth graders and 36% in 12th graders.

b. The values are the mean of use in both sexes combined. In India the use varies dramatically between the sexes: alcohol use is 27.3% in males (adults and adolescents combined) and 1.6% in females, resulting in an 'average' use of only 16.4% for the entire population (1). In the USA the use of tobacco, alcohol, cannabis and illicit drugs by adolescent girls and boys is almost equal in the present generation.

c. There is wide disparity in the pattern and severity of drug abuse among states. While the prevalence of alcohol consumption in Indians aged 10-75 years is 27.3%, it is reported to be as low as 1.7% in Bihar and 7.2% in Gujarat, both of which prohibit alcohol consumption. On the other hand, it is as high as 62.1% in Tripura, 57.2% in Chhattisgarh and 51.7% in Punjab, and one presumes that alcohol addiction is a major issue in adolescents in these states. However, adolescent alcohol use does not necessarily follow the adult pattern. It is at least thrice the national average of 1.3% in three states: in Punjab (6%), which has a high prevalence of alcohol abuse; in West Bengal (3.9%), where overall consumption is close to the national average; and in Maharashtra (3.8%), which is supposed to be a low-consumption state.

Tobacco Use:

In the USA adolescents who use tobacco are more likely to use alcohol, to have unprotected sex, eight times more likely to use marijuana, and twenty two times more likely to use cocaine. One in 5 deaths in the USA is attributable to smoking, mostly through heart attacks, strokes and cancer.

a. While the MoSJE survey of 2018 did not go into tobacco consumption, the UDAYA (Understanding Adolescents and Young Adults) survey conducted in Uttar Pradesh and Bihar in 2016 (with a database of 5969 adolescent boys aged 10–19 years) revealed 16% substance use in adolescent boys (3). 15.4% were tobacco users, 4.8% consumed alcohol, only 0.6% used illicit drugs, and some used multiple substances.

b. In a detailed study of licit substance use published in 2020, a multi-stage sampling of schools was performed in Noida and Ghaziabad cities of Uttar Pradesh (4). 7224 students of Class 7–12 (age 11–19 years) answered a pretested self-administered questionnaire on whether, when and why they had ever used alcohol or tobacco. Girls used substances almost as much as boys. 9.7% of boys and 8.7% of girls had smoked or chewed tobacco at least once. 8.7% of boys and 6.6% of girls had used alcohol at least once. Astonishingly, substance use was initiated by 11 years in 257 (3.6% of all the students), by 12-13 years in 330 (4.6%) and 14-19 years in 283 (3.9%). 32% of the boys and 42% of the girls adopted these habits to make friends, and 13% felt that one looks smart if using these substances. Only 10.7% of substance-using students expected to continue using these products; the rest confidently expected to quit in future.

c. The same team of investigators had reported a similar study on tobacco use alone in 2011 (5).Data was collected from 4786 students of class 7 to 12 (age: 11-19 years) of Noida city during July-December 2005. It revealed that 12.2% of boys and 10.2% of girls had smoked or chewed tobacco at least once, indicating that tobacco use was more popular in the past. This trend is clearly visible in the USA, where cigarette smoking (30-day prevalence) peaked in 1997 at 36.5% and then steadily fell to a low of 7.5% in 2020. Unfortunately, these gains were negated by the invention of the e-cigarette in 2003, which attained a 30-day prevalence of 24.7% in 2020.

d. The Government of India banned manufacture, import and sale of e-cigarettes in 2019, but cheap unbranded Chinese devices are

available online, especially through the dark net, and even in tobacco shops. The Health Ministry issued a notice on 23 May, 2023 to take firmer action to enforce this law (6). E-cigarettes, like cigarettes, cause dry cough and throat irritation. They don't stain the teeth and fingers, but they cause bad breath and reduce sports performance. They are usually flavored, and are perceived as cool and modern. They have high levels of nicotine, and most of the toxins seen in e-cigarettes, and additional metallic poisons, and may cause lipoid pneumonia. They are addictive and probably as risky as cigarettes.

e. Hookah is as harmful as cigarettes, and contains similar concentrations of nicotine, carbon monoxide and tar. Hookah bars have opened in many cities and towns across India offering 'a great ambience, delicious food, and a happy smoke' at a hefty price to impressionable youth.

Alcohol consumption:

Alcohol consumption before 15 years is strongly associated with future alcohol abuse. Alcohol use, especially heavy drinking, is associated with violence, road traffic accidents, risky sexual behavior and academic problems.

In Assam and other parts of North India, home-made alcoholic drinks (rice-based beers) are traditionally served at social functions, and parents often offer it to their children. Some of the adolescents later go on to use commercially available alcohol (IMFL - Indian Made Foreign Liquor), and a few become habitual users. A 2016 study of 1285 students aged 12 - 20 years in a busy industrial township showed that 512 consumed alcohol (7).

Table 2: Type of alcohol consumed

Alcohol Consumption	Adolescent Boys	Adolescent Girls
Home-made	162 (24%)	192 (31 %)
Home-made + IMFL	77 (12 %)	31 (05%)
IMFL	44 (07 %)	8 (01%)
Total	281 (43%)	231 (37%)

- Alcohol consumption was not much lower in girls than in boys.
- The mean age of initiating consumption was 11 years for homemade alcohol (earliest 4 years) and 14 years for IMFL (earliest 7 years).
- Alcohol consumption among adolescents was 29% when parents abstained, 48% when the father consumed alcohol, and 62% when the mother did.

Cannabis:

Global cannabis use is 3.9% at 15-64 years. In India, illegal ganja use at 10-75 years is only 1.2% today, but climbs to 2.8% if the milder (and legal) bhang is included (1). The frequent newspaper reports of the seizure of cannabis suggest that it may be a growing menace. Cannabis cultivation is legal in Uttarakhand since 2019 for non-narcotic and industrial purposes. The Himachal Government on May 21, 2023 decided to send a team of legislators to Uttarakhand to study whether legalizing cannabis cultivation will provide revenue and jobs (8).

Other drugs of abuse:

A multi-stage sampling study of college students throughout Kashmir in 2013 revealed that 38% of male and 20% of female college students had tried various substances at least once (9). The most common substance were tobacco products (23%) followed by solvents (10%), alcohol (6%), sedatives (6%), cannabis (4%), amphetamine products (2%), hallucinogens (0.5%) and cocaine (0.3%). 35% used multiple substances. The source of the

substance used was usually the local grocery shop or chemist (65%), a friend (30%), a dealer (13%), or a driver (6%).

Inhalants:

This is the only substance whose abuse is more common in adolescents than in adults (1). The substances used are all low-cost and freely available; it is only their abuse as inhalant which is illegal. They include a wide variety of substances, such as ink correction fluid, petrol, paint thinner, glue and shoe polish. As the intoxication only lasts a few minutes, the user inhales the fumes repeatedly for an hour or more. Depending on the specific substance, chronic usage most commonly results in damage to the lungs, the kidneys or the brain. Diagnosis is difficult; management is supportive. Inhalants are usually given up spontaneously at an older age for more 'adult' alternatives.

MDMA (Methylene Dioxy Methamphetamine)

New illicit drugs are being used increasingly. MDMA is a hallucinogen and a euphoria drug. It causes a feeling of high energy and excitability. This costly product is the preferred drug at 'rave parties,' massive all-night dance parties frequented by young adults who are recently employed or flush with pocket money.

A gang manufactured MDMA in a lab set up on the top floor of a house in Greater Noida (10). The police raid uncovered 46 kg of MDMA worth Rs 200 crores. The gang had already sold over 220 kg of drugs worth around 1000 crores of rupees in a single year. They would send new members to Africa to get trained on how to acquire the basic chemicals like ephedrine and acetone, how to store them, and how to make MDMA from them.

Other Drugs (1)

a. In some states opium production and consumption is legal. While opium use has remained static at 0.5% over the last two decades, the use of other opiates has increased. Injection heroin use has shot up from 0.2% to 1.1% in northern states, and pharmaceutical opioids like Buprenorphine injection are used in some southern states.

b. The use of LSD, cocaine, amphetamine type stimulants (ATS) and barbiturates are not major public health issues – as yet.

c. Cough syrups containing codeine and dextromethorphan are often misused, as also sedatives like barbiturates and benzodiazepines.

Prevention (1):

- A supportive family atmosphere, role modeling by parents, and open discussion about the hazards of drug abuse in early adolescence are the best protective factors.
- Creating awareness of the dangers of substance abuse is an important first step, though it is a poor deterrent.
- Strict enforcement of laws to prevent drug availability and of underage use is more effective.
- Drug users should be considered as patients needing therapy rather than as criminals.
- Out-patient counseling is effective but requires training.
- Routine in-patient management is not practical except in sick and violent addicts.

Conclusions:

1. There is a paucity of quality data on substance use in India, especially in adolescents.
2. Tobacco use may be declining. The ban on e-cigarettes should be stringently enforced, to prevent a reversal of this trend.
3. Substance use is socially and culturally acceptable during festivals in some parts of the country, as in the use of bhang and of home-made alcoholic drinks– and even at parties.

4. A significant percentage of Indians are initiated into tobacco and alcohol use in adolescence. Early initiation carries a high risk of future dependence. 70-90 % of adult users started off in adolescence.
5. Illicit drug use is on the rise.
6. Inhalant use is more common in adolescents than adults, especially among street children and those who are out of school and employed.
7. Substance use is increasingly becoming acceptable among adolescent girls.
8. Our vulnerable adolescents are strongly influenced by trends in developed nations, and we must beware of trends like the popularity of vaping devices and hookahs, and of substance use at parties.

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Prevention and management of Adolescent Sexual abuse

DR. J.S. TUTEJA
Indore

"Sexual abuse often remains hidden in a culture of silence". **- Dr Etienne Krug**

Introduction:

The sexual abuse of children and adolescents is a gross violation of their human rights and a global public health problem. Millions of children and adolescents are subjected to sexual abuse with devastating consequences for their health and well-being which often last into adulthood. It is estimated that 18% of girls and 8% of boys worldwide have experienced sexual abuse.

Health care providers are often the first point of call for distressed parents or adolescents. They need to know how to identify such abuse and provide an empathetic and supportive response to children and adolescents when they disclose, or show signs of, abuse. Health care providers can also help to connect survivors of abuse to other services that they may need through referrals. [1]

This includes fondling and all forms of oral-genital, genital, or anal contact with the child (whether the victim is clothed or unclothed), as well as non-touching abuses such as exhibitionism, voyeurism, or involving the child in pornography [1].

Adolescent sexual abuse how we define it?

Child sexual abuse is a significant public health problem and an adverse childhood experience (ACE). Adolescent sexual abuse refers to the involvement of a child (person between 10 to 18 years old) in sexual activity that violates the laws or social taboos of society and that he/she does not fully comprehend/does not consent to or is unable to give informed consent to, or/is not developmentally prepared for and cannot give consent to! [2], [3] Indian Data base 2020-2021

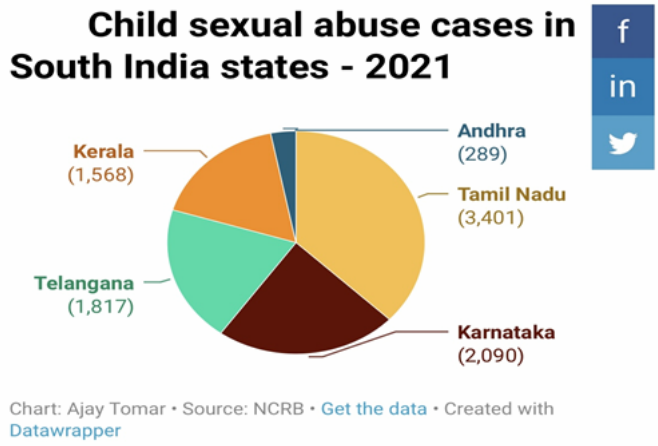
NCRB 2021 data: 24% hike in child sexual abuse cases in 5 South India states; Tamil Nadu 4th in India

As per the report, a total of 50,935 child abuse cases were registered in 2021 — with more than one-fourth (13,089) of the cases registered in South India — under the 2012 Protection of Children from Sexual Offences (POCSO) Act, which aims to protect juveniles from sexual abuse.

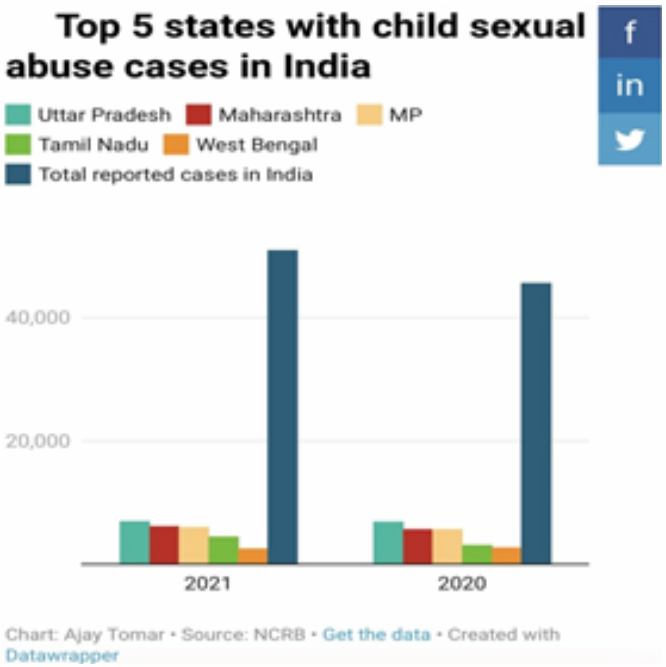
While Uttar Pradesh leads the national figures, Tamil Nadu is ranked fourth among the 28 states and is behind only Maharashtra and Madhya Pradesh.

The nature of sexual offences against children includes rape, sexual assault, sexual harassment, use of a child for pornography, and other unnatural offences under the POCSO Act. In South India, Tamil Nadu is followed by Karnataka (2,813 cases), Telangana (2,698 cases), Kerala (2,647 cases), and Andhra Pradesh (466). [3]

Indian Data base 2020-2021



Indian Data base 2020-2021



The idea that any adult would sexually abuse a child is terrifying, especially for parents and caregivers. But like any risk our children might face, we need to be able to empower them with information that will help them recognize unsafe situations. We also need to know how to respond to these situations if they occur.

Sexual abuse is a particularly difficult issue for caregivers, since there usually are no outward, easily noticed signs of the abuse. And when they are there, the signs of abuse often are vague. Learning about and being alert to potential signs of sexual abuse can help us feel more grounded and better equipped to keep our children safe. There most important step to keeping children safe is prevention. There are key things we can teach our children that may reduce the chances they will fall prey to a sexual predator. [4]

How to assess sexual abuse

For example, they might:

- Withdraw from family and friends
- Struggle in school
- Show anger and aggression
- Suffer from nightmares or extreme fears
- Avoid certain adults
- Have symptoms of sexually transmitted infections

When caregivers identify such signs this represents a good opportunity to ask children if anything is going on in their life that is bothering them.

Sexual abuse can happen more than once. It might go on for months or years. Children who have been previously sexually abused are also at risk for future abuse/assault events.

Abusers frequently do not use physical force. They are more likely to use words and ideas to engage a child. They often warn their victims not to tell anyone, which might make it even more difficult for a child to report what happened.

The following are indicators of POSSIBLE sexual abuse. Please remember that these physical and behavioural indicators may be due to another reason. [5]

INDICATORS OF SEXUAL ABUSE: [2]

Physical Indicators:

- Difficulty urinating or having bowel movements
- Difficulty walking or sitting

- Tearing, stains or blood on a child's underclothing
- Genital or anal bruises, fissures and lacerations
- Frequent vaginal infections
- Frequent urinary tract infections or yeast infections
- Sexually transmitted diseases
- Pain or itching in the genital area
- Physical complaints, such as headaches and stomach-aches

Behavioural Indicators:

- Verbal statements by the child
- Acting out or passive withdrawal/depression
- Persistent and inappropriate sexual play with toys, animals or peers
- Detailed and unexplained sexual knowledge beyond age expectations
- Seductive, precocious sexual behaviour and gender confusion
- Aggressive sexual behaviour, especially in boy victims
- Excessive, persistent public masturbation
- Disturbances in eating patterns (i.e. binge eating, loss of appetite, gagging, hoarding food)
- Disturbances in toileting patterns (i.e. wetting/soiling themselves)
- Disturbances in sleep patterns (i.e. nightmares, night terrors, fear of the dark, fear of being alone in bedroom, wanting to sleep with a parent)
- Extraordinary fear of the same sex adults, baby-sitters, etc.
- Unexplained and unusually intensive guardedness, mistrust, clinging and watchfulness
- Role reversal, overly concerned for siblings
- Regression: Returning to earlier behaviours that have been outgrown
- Outbursts and tantrums, irritability
- "Fragile" feelings (i.e. hurt easily, quick to cry)
- Nervous behaviour, worry
- Bedwetting or thumb sucking
- Poor self-esteem, self-devaluation, lack of confidence
- Suicide attempts (especially teens)
- Sudden difficulties in school
- Threatened by physical contact or closeness [2]

Consequences due to sexual abuse:

This can result in short- and long-term physical, mental, and behavioural health consequences.

Physical health consequences:

- sexually transmitted infections (STIs)
- Physical injuries
- Chronic conditions later in life, such as heart disease, obesity, and cancer

Mental health consequences:

- Depression
- Post traumatic stress disorder (PTSD) symptoms

Behavioural consequences:

- substance use/misuse including opium
- High risk sexual behaviours, meaning sex with multiple partners or behaviours that could result in pregnancy or STIs
- Increased risk for perpetration of sexual

violence

- Increased risk for suicide or suicide attempts

Experiencing child sexual abuse can also increase a person's risk for future victimization. For example, recent studies have found that females exposed to child sexual abuse are at 2-13 times increased risk of sexual violence victimization in adulthood and people who experienced child sexual abuse are at twice the risk for non-sexual intimate partner violence[2]

Child sexual abuse prevention:

The management of sexual abuse involves prevention of sexually transmitted infections (STIs) and pregnancy. Psychosocial support and anticipatory guidance should also be offered to the victims and their non-offending caregivers.

The evaluation and management of sexual abuse should be performed by an experienced child abuse team including a child abuse specialist or clinician with similar experience. Whenever possible, urgent evaluation is necessary. [6]

Adults are responsible for ensuring that children have safe, stable, nurturing relationships and environments. Resources for child sexual abuse have mostly focused on treatment for victims and criminal justice-oriented approaches for perpetrators. These efforts are important after child sexual abuse has occurred. However, little investment has been made in primary prevention or preventing child sexual abuse. Effective evidence-based strategies are available to proactively protecting children from child sexual abuse, but few have been widely disseminated.

More resources are needed to develop, evaluate, and implement evidence-based child sexual abuse primary prevention strategies. These strategies can help ensure that all children have safe, stable, nurturing relationships and environments. [6]

PREVENT SEXUAL ABUSE-PARENTS ROLE:[5]

When it comes to sexual abuse, prevention is the key. So, what can parents do to prevent child sexual abuse? Here are five tips that will help you keep your children safe.

1. LEARN AS MUCH INFORMATION AS YOU CAN ABOUT PHYSICAL AND SEXUAL ABUSE. Learn who is most likely to commit crimes of abuse, why adults abuse children, etc. Seek out preventative information about child sexual abuse.
2. LISTEN AND TALK WITH YOUR CHILDREN. Communication is the most important principle in keeping your kids safe from sexual abuse. Create a climate in your home where kids are not afraid to share information about things they may be embarrassed or afraid about. Be willing to share what you know about sexual abuse and how to prevent it with your children. Tell your children the basics such as, "No one has the right to touch your body without your permission."
3. TEACH THE 5 PERSONAL SAFETY BOUNDARY RULES. Start early with your children (in an age appropriate way) and set clear safety boundary rules for your children.

The following list gives the personal safety boundary rules.

- No one should look at the private parts of your body.
- No one should ask you to look at the private parts of their body.
- No one should touch the private parts of your body.
- No one should ask you to touch the private parts of their body.
- No one should show you pictures of private parts on the TV, in magazines, on the computer or on a mobile phone.

- Use proper names for all their private parts. (Many children are not able to tell about the abuse, because they do not know the proper words to use and tend to use nicknames for their private areas.)
- Safety rules apply to ALL adults, not just to strangers. Emphasize that NO ONE should try to break boundary rules.
- Have the child repeat the phrase "My Body Belongs to Me". At the end of the initial discussion ask the child "Who does your body belong to?" The child should be able to say "my body belongs to me."
- It is okay to say NO if someone tries to touch their body or do things that make them feel uncomfortable, no matter whom the person is.
- They should never keep secrets about touching, no matter what the person says.
- If someone touches them, tell and keep telling until someone listens!
- No matter what, children need to know that if someone tries to break boundary rules, it was never the child's fault.
- Let the child know that they won't get in trouble if someone tries to break boundary rules and they come to tell you. You are a safe person they can tell.

KNOW THE ADULTS AND TEENS IN YOUR CHILDREN'S LIVES.

From getting to know teachers, coaches and youth workers to interviewing potential baby sitters, you should know as much as you can, about the adults and teens the children spend time with. Any adult that seems more interested in your children than you do should raise a cautionary flag in your mind.

KEEP TABS ON YOUR KIDS.

Know where your children are and whom they are with. Make it a family rule that if your children's plans change, they must notify you before they do something or go somewhere you don't know about.

Teach your child about body autonomy [4]

Body autonomy begins with simple things you can teach your child, starting in their toddler years and reaffirming the lessons as they grow. For example, you can teach them:

- The real names of their body parts, emphasizing that it's natural and healthy to talk about all areas of our bodies
- Who can look at or touch their private parts and under what conditions—like doctors to make sure that you are healthy and that too in your mother's presence only
- That it's fine to say "No" to anyone, including adults, if they don't want to be touched or hugged
- That some secrets—like plans for a surprise birthday party—are safe to keep, but other secrets should always be shared with a trusted adult

Key recommendations for health care providers: [1]

1. Provide first line support that is child or adolescent-centred and gender sensitive in response to disclosure of sexual abuse.
2. Minimize additional trauma and distress while taking medical history, conducting the examination and documenting the findings.
3. Offer post-rape care that includes HIV post-exposure prophylaxis and adherence support, emergency contraception, STI presumptive treatment where testing is not feasible and Hepatitis B and HPV vaccinations as per national guidance.
4. Consider cognitive behavioural therapy (CBT) with a trauma focus to those who have PTSD symptoms and diagnosis, and where safe and appropriate to do so, involve at least one non-offending caregiver.

5. Wherever required, to report child sexual abuse to designated authorities, health care providers should inform the child or adolescent and their non-offending caregivers about the obligation to report the abuse and the limits of confidentiality before interviewing them.

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Adolescent PCOD: A practical review for pediatricians

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1. Introduction:

Polycystic ovary disease has been described in the published medical literature since last many decades. The National Institute of Health [NIH] in 1990 followed by Rotterdam consensus in 2003 tried to define this broad syndrome using three major criteria viz. oligo-amenorrhea, hyperandrogenism and ovarian cysts. Ultrasound criteria for Polycystic ovarian morphology [PCOM] includes large sized ovaries above 10ml with more than 12 cysts in a peripherally arranged manner. PCOD has a close association with insulin resistance, metabolic syndrome and type 2 diabetes. Epidemiological data from India has suggested that the incidence of PCOD is increasing dramatically, and currently 6-10% of Indian adolescent girls suffer from it. PCOD is associated with poor fertility and adverse pregnancy outcomes.

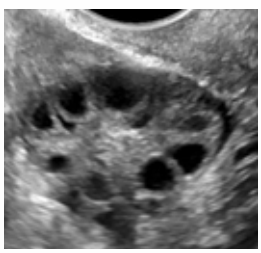

Figure 1: Ovary showing polycystic morphology with multiple cysts and echogenic stroma

2.Physiologic / common findings in puberty:

During the first few years post-menarche, the cycles are often irregular. It takes some time for the hypothalamo-ovarian axis to settle down and ovulation to commence. Many of the initial cycles are anovulatory. A certain degree of hyperandrogenism, such as acne vulgaris, is seen physiologically in puberty. Almost 70% of normal adolescents have ultrasound features of PCO morphology.

3. Adolescent PCOD:

There are many physiologic variations during puberty that may get wrongly labeled as PCOD. Hence it is important to define adolescent PCOD carefully. Adolescent PCOD is defined as PCOD occurring within 8 gynecological years [post-menarche]. For diagnosis of adolescent PCOD, ultrasound findings are not necessary. Adolescent PCOD is defined on the basis of two criteria: irregular menses and hyperandrogenism [severe acne, hirsutism, androgenic alopecia], after ruling out other possible causes.

3.1 Irregular menses

While certain irregularity is accepted, frank PCOD should not be missed under the pretext of 'physiological'. Following are the criteria defined by the International Guidelines on adolescent PCOD [Penna et al. BMC 2020]

Gynecological age	Irregularity
<1yr	Physiological
1yr <	No menses for 90 days
1-3 years	Cycle duration in days <21/45<
3yr<	Cycle duration in days <21/35<
Anytime	No menses till 15th birthday No menses till 3 years post thelarche

3.2 Defining hyperandrogenism

Adrenals and ovaries are the two sources of androgens in females. While some androgen production gives rise to pimples and some body hair in puberty; a moderate to severe hirsutism [measured as modified Ferriman Gallwey (mFG) Score more than 4-6] is considered significant. A self-reported psychologically disturbing hirsutism should not be neglected just based on mFG. A biochemical hyperandrogenism is defined by documenting testosterone levels [or free testosterone is available]. A drug free interval of three months is necessary for documenting hyperandrogenism if the girl has been receiving hormonal treatment.

3.3 Ruling out other causes:

Hypothyroidism is a common cause of irregular menses. Mild hyperprolactinemia is common is many conditions including migraine headache, use of antacid preparations, and PCOD itself.Prolactin levels above three times the upper range are taken as significantly raised. Hypogonadism, either at the level of pituitary or ovarian level, needs to be ruled out based on FSH and LH levels. A high LH level and a ratio of LH/FSH above 2 if suggestive [not diagnostic] of PCOD. Late-onset congenital adrenal hyperplasia is a PCOD mimic. Clitoromegaly, darker complexion and borderline short stature might be subtle clues. A basal 8am 17-hydroxy-progesterone value >200ng/dl or synacthen stimulated value >1000ng/dl confirms the diagnosis. Pregnancy is possible and needs to be ruled out. Asking for urine pregnancy test may be stigmatizing for the family, hence a serum beta-hCG can be ordered as a part of other blood work.

Blood parameter	Inference
LH	High values and LH/FSH ratio > 2 suggest PCOD
FSH	FSH values above 40 indicate gonadal failure and not PCOD
Thyroid function	Primary hypothyroid [high TSH] can give rise to ovarian cysts and irregular cycles
Testosterone levels	Elevated levels suggest PCOD
b-hCG	To rule out pregnancy
Prolactin	Hyperprolactinemia can cause irregular cycles
17-OH-progesterone	Late onset CAH needs to be ruled out

Figure 2: Blood work-up for irregular menses in adolescents

3.4: Comorbidities of PCOD:

Obesity and metabolic syndrome are common associations. Acanthosis nigricans suggests insulin resistance. Adult PCOD has been shown to be closely associated with dyslipidemias [low HDL, high LDL, triglycerides] and steatohepatitis. Coronary artery calcific plaques are common in women with PCOD than those without. The sequels of PCOD include infertility and bad obstetric outcomes.

4. Treatment of adolescent PCOD

Lifestyle modification, with diet and exercise and sleep, is the mainstay treatment. Reduction in weight by 5% among obese PCOD girls has been shown to correct irregular menses in some studies.

Local cosmetic therapies such as epilation, waxing or threading are safe and effective ways to treat hirsutism. Local eflornithine cream [13.9%] applied twice a day been shown to reduce hirsutism in most cases, but it tends to recur after stopping the treatment.

Progesterone only pills, such as Deviry (medroxyprogesterone 10mg) can be used to induce withdrawal bleeding if the cycles are delayed beyond 15 days [cycle duration > 45

days]. Progesterone only pills can be tried for initial 3-6months as they are safe, have less side-effects and have no social stigma of being a 'contraceptive'.

Combined hormone pill with ethinyl estradiol (EE) and non-androgenic progestins (drosperinone, cyproterone) are administered for cycle normalization in girls as early as age 12 years, as per a few randomized controlled trials. Combination pills not only help in cycle regularization, but also reduce the free androgens by suppressing Sex-hormone binding globulin as well as LH. Generally, combinations with ethinyl estradiol 30-35mcg will be needed. While higher doses (>35mcg) are associated with increased risk of thrombo-embolism, lower doses (15-20mcg) may be ineffective in suppressing the androgens and LH. Common brands used are Dronis20/Crisanta-LS/Dafadros-LS [EE 20mcg, Drosperinone 3mg], Carpela [EE 30mcg + Cyproterone 2mg]. Parents need to be counseled that this pill is being prescribed for cycle regularization and not as contraceptive. They also need to be warned about possible water retention, minimal weight gain, headaches, mild breast tenderness, acidity and bloating may happen during initial cycles. Blood pressure needs to be checked with every OPD visit.

Metformin is the drug of choice for adolescents with type 2 diabetes. It is also considered if overweight or acanthosis nigricans persist after 6 months of lifestyle modification. Metformin has shown to improve insulin sensitivity, reduce hepatic gluconeogenesis, reduce appetite and reduce body mass index. A dose of 500-1500mg/ day for 6-12 months have been tried.Although very well tolerated drug, mild abdominal pain is common. Hypoglycemia is uncommon and lactic acidosis is extremely rare.

Anti-androgen therapies, such as finasteride, spironolactone or flutamide can be used if COCs do not help in reduction of androgenic symptoms after 6 months of use. In a recent large cohort study, early initiation of anti-androgen therapy was associated with better fertility outcomes in long term.

5. What NOT to do with adolescent PCOD?

As already mentioned, relying on ultrasound morphology for defining adolescent PCOD is not recommended, as multiple follicles are common

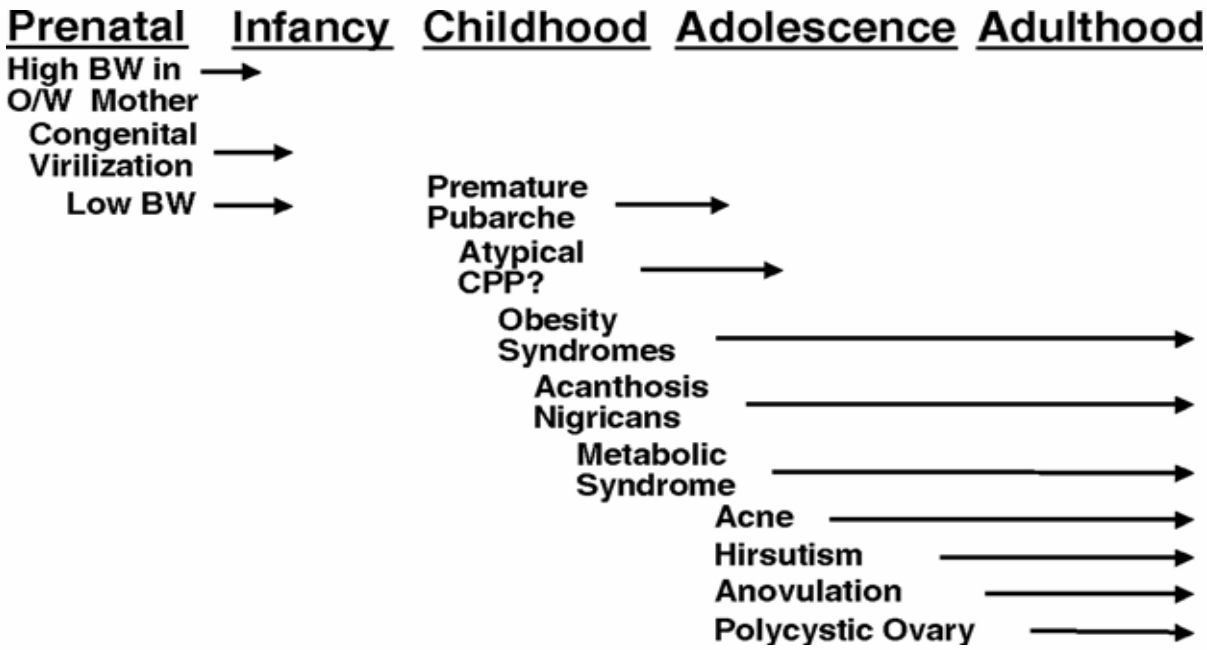

Figure 3: Rosenfield RL. Clinical review: Identifying children at risk for polycystic ovary syndrome. J Clin Endocrinol Metab. 2007 Mar;92(3):787-96.

features during this age.

Anti-mullerian hormone is one biomarker that is often found to be elevated in adult PCOD. However, there is a lot of overlap between normal and abnormal population, and age specific normative data is not available. Hence it is not to be used as a diagnostic criterion.

Serum insulin levels are not diagnostic of insulin resistance as adolescence is a state of physiologically high insulin levels, and there are as there are overlapping values. Insulin levels are to be left to the researchers and are not for clinicians.

Many of the adolescents are still in their phases of growth. Starting a standard dose combined oral contraceptive [ethinyl estradiol of 35mcg or above] will quickly fuse the epiphysis and stop them from gaining further height. In addition, they also pose a risk of thrombo-embolic episodes. A low dose [30mcg or less of Ethinyl Estradiol] combination pill is preferred.

Long term safety and efficacy data is lacking for most of the drugs.

Lean PCOD:

Although PCOD girls are commonly obese or have abnormal fat distribution, there are a proportion of girls that have normal BMI. These girls are referred to as lean PCOD. Insulin resistance is associated with lean PCOD and they generally have lesser marked phenotype than obese counterparts. Mainstay treatment remains weight maintenance [avoiding obesity], metformin and anti-androgen therapy for hirsutism.

Referring to pediatric endocrinologist:

A certain group of PCOD girls will need special care, and need to be referred to pediatric endocrinologist for further work-up and treatment:

1. Severe obesity
2. Hypertension, Diabetes
3. Clitoromegaly, short stature, atypical genitalia
4. Signs of Cushing's syndrome: large striae, thinning of skin, moon facies, buffalo hump, myopathy
5. Signs of Acromegaly: Tall stature, facial features, sweaty palms, headaches, visual disturbance

Can we predict/ prevent PCOD?

There are known risk factors and associations of PCOD. Girls born small-for-gestational age [SGA] and large-for-gestational age [LGA], premature adrenarche, obesity, metabolic syndrome, precocious puberty; and family history of PCOD/Diabetes/Obesity are some of the known risk factors.

Recent studies have shown that rapid weight gain during first 4 years of life is associated with early adrenarche.

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Hazards of Social Media and the ways out

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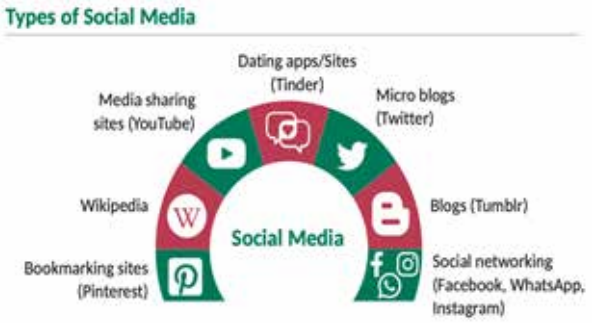
Mass media is the greatest evolution of the century.Print media is available periodically but electronic media is available 24/7.Electronic media are Radio, Television, Computers, Video games, Internet,

Mobile phones, I pad, Tablet and New addition is Apple watch. Electronic media and gadgets have become a part of daily life for everyone more so for the children and adolescentsespecially during and after the Covid pandemic. The present era can be labeled as the Age of "Screenagers".Its use is getting increasingly pervasive even in infants and toddlers.Parents are happy about child's expertise with gadgets. Care givers perceive as more beneficial than harmful (utilized for managing children) and leads to overuse.

Traditionally, family, teachers and peers are expected to influence the lives of children but nowadays social media is playing that role, come to rival parents, school and religion, shape the trends of society.

Social media can be defined as any web or mobile based platform that enables an individual or agency tocommunicate interactively, and to exchange user generated content. Simplified definition is media used for social interaction.



(RKSK guidelines, Participant's handbook, for Training of Medical Officers on Adolescent Friendly Health Services, Promotion of safe use of Internet, Gadgets and Social Media)

Social media is different from any other media in quality (very palatable, creates craving), frequency and reach, (phenomenal) usability, immediacy (instant availability) durability (stays in mind for long time) and obviously excessive use leads to addiction.

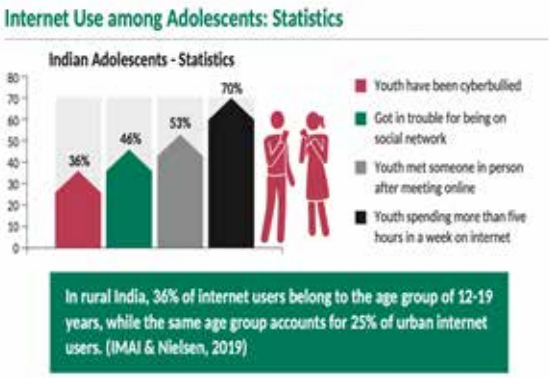
Social media promises many things which attract all. It was invented for the benefit of mankind.

Main advantage is socialisation-social connectedness, which is important for psychological development, especially useful

for who have low self esteem, social anxiety, depression, chronic diseases and for marginalized adolescents to connect. Adolescents find social media useful to develop and nurture friendships. It helps for easy, fast and inexpensive connectivity. Social media offers knowledge and information about innovations, ideas, entertainment, navigation, google maps, financial transactions. Social media campaigns are effective means to promote behavior change, like prevention and control of substance abuse, encouraging physical activities,maintaining healthy diet and prevention of sexually transmitted diseases in adolescents. It helps to create social identity without parents' supervision.New job opportunities can be made available at the command of one's finger tips. Most of us are benefitted and have positive interactions.

In most cases, the effects of social media are dependent on adolescents' own personal and psychological characteristics and social circumstances and what teens can do and see online, teens' pre-existing strengths or vulnerabilities, and the contexts in which they grow up. This is the basis of detecting and treating co-morbid conditions like anxiety, depression, substance abuse, ADHD with social media addiction

Indians are top users of many apps. Nearly 10% of Whatsapp users in the world are Indians.



(RKSK guidelines, Participant's handbook, for Training of Medical Officers on Adolescent Friendly Health Services, Promotion of safe use of Internet, Gadgets and Social Media)

There have been growing concerns about the time spent and impact of screens on children and young people's health as adolescents spend a significant amount of time in viewing and interacting with media in the form of TV, Music, Video games and Social networking sites.

Half of waking time is spend in front of screen and one third is used to interact on social media

When someone experiences something rewarding or uses an addictive substance, neurons in the dopamine-producing areas in the brain are activated and dopamine levels rise and makes to feel good. This is observable in social media usage; when an individual gets a notification, such as a like or mention, the brain receives a rush of dopamine and sends it along reward pathways, causing the individual to feel pleasure. Social media provides an endless amount of immediate rewards in the form of attention from others for relatively minimal effort. Social media use becomes problematic when someone views social networking sites as an important coping mechanism to relieve stress, loneliness, or depression. Social media use provides these individuals with continuous rewards that they're not receiving in real life, so they end up engaging in the activity more and more. This continuous use eventually leads to multiple interpersonal problems, such as ignoring real life relationships, work or school responsibilities, and physical health, which may then exacerbate an individual's undesirable moods. This then causes people to engage in the social networking behaviour even more as a way of relieving dysphoric mood states. When

social network users repeat this cyclical pattern of relieving undesirable moods with social media use, the level of psychological dependency on social media increases and leads to addiction.

Potential risks are likely to be greater in adolescence – a period of greater biological, social and psychological transitions, than in adulthood. Brain regions associated with a desire for attention,

Feedback and reinforcement from peers (The limbic system) become increasingly sensitive beginnings in early adolescence and regions associated with mature self control: the prefrontal cortex is not fully developed until adulthood. Parental monitoring and developmentally appropriate limit setting thus is critical.

Social Media Hazards (Physical, mental, emotional, interpersonal relationship issues)

Physical health

Obesity: Reduced physical activity and excessive consumption of JUNCS are main contributory factors for gaining excessive weight

Poor eating habits: There is a tendency to consume more food and snacks while using Screen. The programs for children are studded with junk food advertisements which are quite tempting.

Eye problems: Prolonged screen time lead to dryness, irritation and burning sensation in eyes .Sleep deprivation adds to the problem.

The correct posture while using computer

Inadequate sleep: Minimum 8-9 hours uninterrupted sleep is required for efficient functioning and concentration .Blue light emitted by the smart phone reduces the secretion of melatonin and delays onset of the sleep. The temptation to see new messages, photos and comment leads to deprivation of sleep which leads to fatigue.

Headaches, body aches, neck pain, pain in the small joints (tenosynovitis)

Road accidents: Using a mobile while driving or walking may causedistraction andincrease the chances of traffic accidents.

Radiation: Phone calls, internet over phone, even idle phone has a lot of radiation around it (all the studies do not support this effect).

Mental and emotional health

Anxiety and Depression: Social media overusemakes everyone worried, anxious about the things that are not existing and not important. If expected response is not received to the message may create anxiety about that person's well being, interest and avoidance/ neglect. A few teenagers feel excluded from the peer group and may fail to update themselves with the latest news and gossip in the group, leading to fear and frustration. FOMO (fear of missing out), FOBLO (feeling of being left out) are labelled based on irrational fear and sense of insecurity. This may lead to depression or thought disorder in which he/she feels being neglected purposefully by the friends

These responses make or break a teenager's life!

Facebook depression is a new phenomenon which develops when adolescent spends a great deal of time on social media sites and then exhibit classic symptoms of depression.Acceptance by

and contact with peers are an important element of adolescent life. As with offline depression, they may sometimes turn to risky internet sites and blogs for help. This may promote substance abuse, unsafe sexual practices or aggressive or self destructive behaviour.

Mood swings: Receiving desired messages & response makes happy .If not then leads to anger, frustration, jealousy and vengeance. It will affect inter personal relationship.

Aggression and violence: Constant preoccupation and imaginary fight scenes make teenagers vulnerable.

Negative attitude impact on attitudes and beliefs: Female is depicted asa weak character and

considered as sex toy .Excessive exposure to pornography leads to distorted concepts about sexuality and sex .This will have impact on future extramarital ,high risk sexual activity.

Poor school performance-poor sleeping habits, lack of concentration, irritability of feeling of FOMO, poor time management to study, distraction. Parents neglect their task in setting limit for social media.

No time for playing, reading, spending time with peers and family, exercise

Cyber bully, cyber harassment: Cyber bullying is a special type of bullying that occurs over digital devices and online with cell phones, computers and tablets.

Cyber bullying can happen via text messaging,SMS,apps,email,onlineinsocialmedia, internet forums, and in online gaming, sending exchanging images, using code words. Cyber bully has become pervasive problem, more so during and post COVID. Prevalence is 6-25%. It happens in the form posting rumors, threats, sexual remarks, hate speech, revealing victim's personal information, ridiculing, taunting, humiliating ,intimidating, sharing pornography, sexting , revenge porn, excluding from group intentionally.

Sexting is a serious hazard-sending, receiving or forwarding sexually explicit messages, photographs or

messages. A recent survey revealed that 20% teens have sent or posted nude or seminude photographs or videos of themselves.

Cyber crime help line number to report is 1930.

Effect on Interpersonal relationship

There are more conflicts with parents with misunderstandings. Teenagers are not able to interact in the real world because it appears less rewarding. Instead, they prefer to have virtual relationship.

Social media addiction is an impulse control disorder and refers to unhealthy dependence and uncontrollable urge to use the social platforms and is considered as non substance abuse. Media can break or make an adolescent and acts as "Double edged weapon"

Internet addiction disorder (IAD) can otherwise be referred to as Problematic internet use or pathological internet use. It generally defined as problematic, compulsive use of the internet that

results in significant impairment in an individual's function in various aspects of life over a prolonged period of time.

Indicators of Problematic Social media use include:

1. A tendency to use social media use even when want to stop, or realize it is interfering with necessary tasks.
2. Spending excessive effort to ensure continuous access to social media.
3. Lying or deceptive behaviour to retain access

to social media use.

4. Spending more time online then intended.
5. Reduced social and peer interactions.
6. Prefers to make virtual friends to escape from challenges and reality of life and loneliness.
7. Neglecting house hold cores.
8. Decline in academic performance.
9. Develops anxiety, irritability and if internet connection fails and nervous if offline.
10. Loss of sleep may cause irritability and vague physical symptoms ,tired feeling

Internet gaming disorder is considered as mental health disorder in DSM 5 but does not include problems with general use of the internet, online gambling, or use of social media or smartphones.

19 Screening tools are available to detect Social media addiction.

SCORING

The IAT total score is the sum of the ratings given by the examinee for the 20 item responses. Each item is rated on a 5-point scale ranging from 0 to 5. The maximum score is 100 points. The higher the score is, the higher is the severity of your problem. Total scores that range from **0 to 30** points are considered to reflect a normal level of Internet usage; scores of **31 to 49** indicate the presence of a mild level of Internet addiction; **50 to 79** reflect the presence of a moderate level; and scores of **80 to 100** indicate a severe dependence upon the Internet.

Young Kimberly Internet Addiction Test involves 20 items

The Bergen Social Media Addiction Scale (BSMAS), a six-item self-report scale that is a brief and

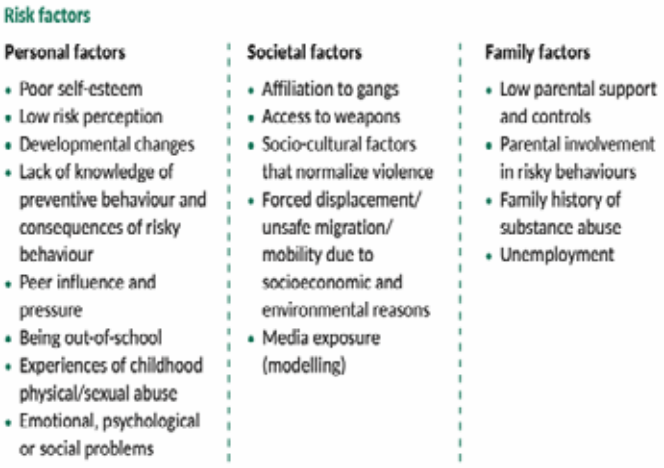
effective psychometric instrument for assessing at-risk social media addiction on the Internet.

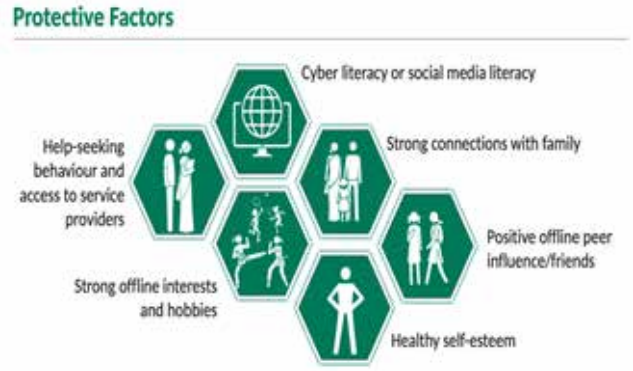
Social Media Use Disorder Scale for Adolescents

ICD-11-Based Assessment of Social Media Use Disorder in Adolescents:

Smart phone Addiction Scale –Short Version (SAS-SV)

Risk factors for social media use





Role modelling of media use by parents and media education before "gifting" the gadgets is the most crucial protective factors.

(RKSK guidelines, Participant's handbook, for Training of Medical Officers on Adolescent Friendly Health Services, Promotion of safe use of Internet, Gadgets and Social Media)

Use of Social media is rapidly evolving and growing area of research with implications for many stake holders (e.g. youth, parents, educators, policymakers, practitioners, and members of the tech industry) who share responsibility to ensure adolescents' well being. Social media use should not compromise sleep, study time, physical activity, relations, eating.

Role of Pediatrician

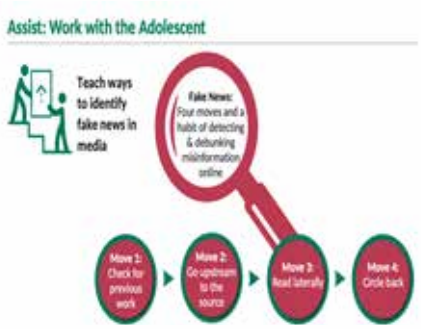
HEEADSSS including media H/ Odiagnosing, counselingadolescents & parents and in severe cases referring for management

Anticipatory guidance in office practice

- Suggest age appropriateuseof social media be based on each adolescent's level of maturity (self -regulation skills ,intellectual development, comprehension of risks)
- Warn about digital foot print left out by sharing information which may come in the way of admission in the universities and jobs
- Cultivate Media literacy: Make teenagers to understand that ,all media messages are

constructed for some purpose.Mass media are often driven by powerful economic or political forces

- Advise about managing privacy settings online, not to share private information about self and family to strangers (they may be predators). Protect the passwords. Refrain from opening links from unknown numbers. Not to share travel plans.
- Not to share revealing pictures / selfies / videos / personal details / OTP etc.
- Fix and ask to monitor screen time with periodic self assessment.
- Tell a trusted adult about cyber bullying, and keep telling until find someone who takes action. Do not open or read messages from cyber bullies, the bully often can be blocked.Report any adversities immediately. Preserving all the evidence onmobile. Never erase the messages as they may be needed to take action.Obtain help from local cyber crime branch / 1930.
- Suggest teenagers should remember that all persons on social sites areNOT as friendly as they seem/actand may fall into the trap of sexual and emotional abuse..
- Never plagiarize, bully



(RKSK guidelines, Participant's handbook, for Training of Medical Officers on Adolescent Friendly Health Services, Promotion of safe use of Internet, Gadgets and Social Media)

Life style modification tips

§ Adolescents using social media should be encouraged to use functions that create opportunities, online friendship and healthy emotional intimacy that can promote healthy socialization.

§ Online social interaction and education is useful during periods of social isolation, when experiencing stress, when seeking connection with similar developmental and / or health conditions especially that experience adversity or isolation in offline environment

Role of parents/ care takers

- Parental monitoring is required. Youth feel that parental controls are invasion of their privacy, while parents feel that they are protecting children from dangers in an on line world. Parents should supervise by giving adolescents appropriate autonomy.
- Parents lack the technical abilities or time to understand these new forms socialization and they should realize that online lives are extension of their offline lives. Parents should be well versed with technology.Knowledge and technical skill gap between parents and youth should not develop disconnect between parents and youth.
- Parents should talk to their children and adolescents about their online use and the specific issues, check privacy settings and online profiles
- Surf the web with the children
- Use tracking software, but nothing can replace supervision without spying.
- Block offensive websites
- Most of the popular social media services require users to be at least 13 years of age before they can register; although some sites are created especially for children under 13 (Internet Matters' Social networks made for children).

Research shows that it takes children about 12 years to fully develop the cognitive functions that enable them to engage in ethical thinking. Before 12 it is difficult for a child to fully grasp the impact of their actions upon others, online or otherwise.

- Parents should be role model.
- Mobiles are not baby sitters.
- Stays connected to their adolescents and spendqualitytime with children.
- Arrange for media free zones like bedroom , dining hall, toilets
- Look for subtle signs of distress
- Consult ASAP

(Atul Kanikar, Parenting in the Digital Era, I.A.P. action plan, Mission "Kishore Uday", 2018-19)

Bangalore's SHUT(Service for healthy use of Technology) clinic in NIMHANS has opened doors to adolescents battling tech addiction.

IAP guidelines (10-18 years)

- Balance screen time with other activities that are required for over all development.(1 hour of outdoor physical activity, 8-9 hours of sleep , time for homework, hobbies , peer interaction and family time)
- Most of the screen time should be related to education, communication , skill development and promoting healthy life style
- Monitor media use in a mutually acceptable manner.
- Ensure data privacy , cyber security, and detect any signs of cyberbullying or media addiction

Key messages

- Social media can be blessing or curse, it entirely depends on how we use it
- Judicious uses of social media can give

fantastic returns

- Spend less time on SNS (social networking service). And more time in the real world.
- Parents should implement digital rules, digital hygiene, and nurture responsible digital citizen inculcate good online habits
- Social media is super power. Therefore handle it with utmost responsibility
- Media education and self-discipline are the only fortifications for our children and us.
- HEEADSSs must include media history about time spent, type of media and cyber harassment if any
- Social media use should not compromise sleep, relations, physical activity , study time

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- From Terrible to Terrific Teens-Dr Atul Kanikar, Managing the mighty (Impact of social media), page 141

PEDICON 2024 – ANNOUNCEMENT

RATES PEDICON 2024 KOCHI

Category	Early Bird upto 31Mar 23	Up to 30 Jun 23	Upto 30 Sep 23	upto 31 Dec 23	From 01 Jan 24
IAP member	11000	18700	27500	37400	45000
Accompanying	11000	18700	27500	37400	45000
Non IAP	16000	37400	44000	55000	66000
Accompanying	16000	37400	44000	55000	66000
PG student	6000	9000	10000	12000	16000
Accompanying	11000	18700	27500	37400	45000
SR citizen	-			11000	11000
Accompanying	11000	18700	27500	37400	45100
SAARC	$250	$250	$300	$550	$750
Non SAARC	$450	$450	$550	$750	$950
Corporates	25000	38500	44000	49000	60000
Accompanying	25000	38500	44000	49000	60000

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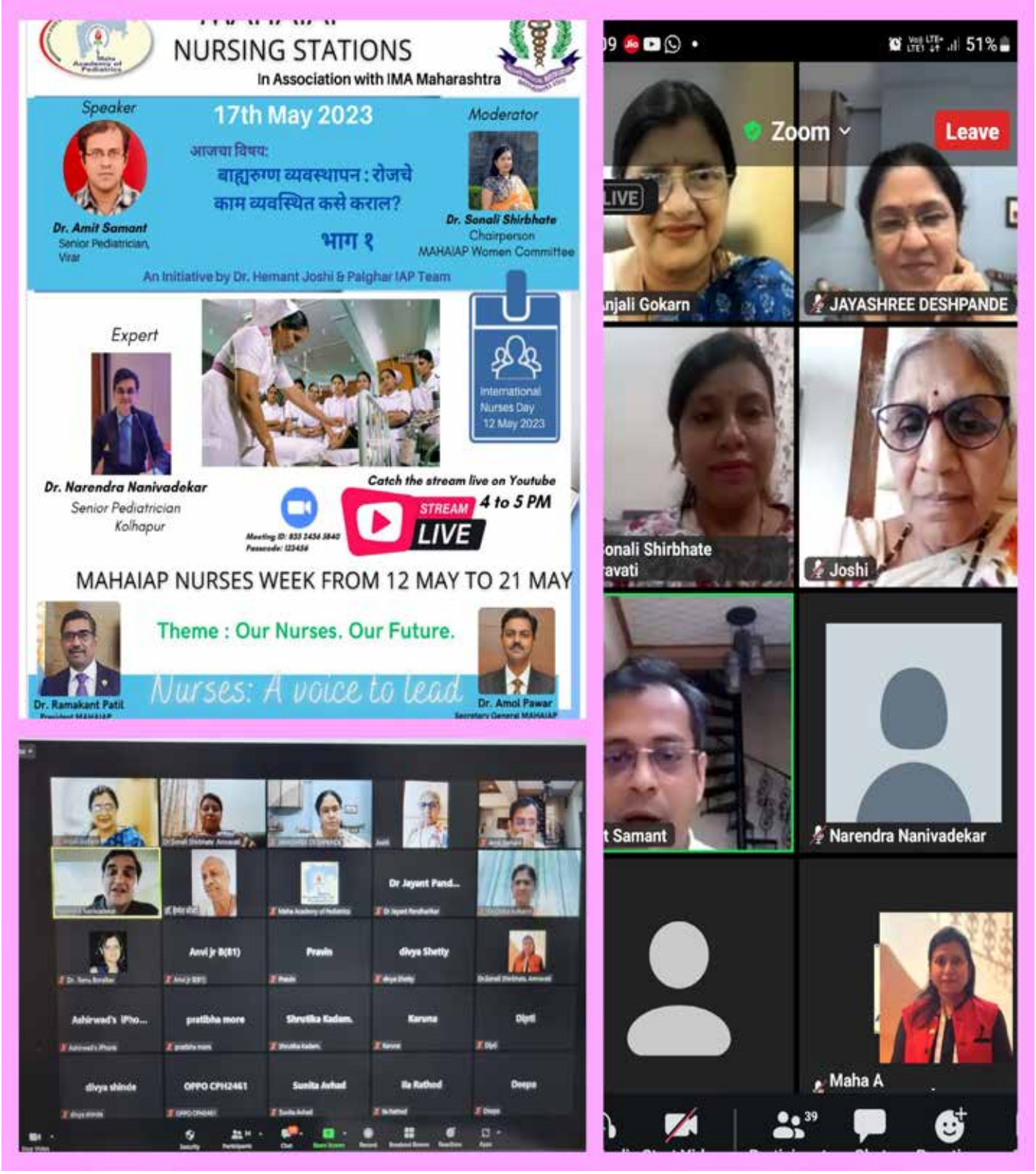
DR M. NARAYANAN
Organising Secretary

DR M. I. JUNAID RAHMAN
Organising Treasurer

FOR ASSISTANCE
Contact Conference Secretariat @ 7012025938

Activities of Women's Committee MahaIAP



May month Nurses Session 17th May

Activities of Women's Committee MahaIAP

27th May 23..Basic Life Support Workshop Organized by IAP Buldhana Branch & Mahaiap 23. Trainers were Dr Manish Jain Sir & Dr Sonali Shirbhate. 72 Nurses were Trained

Activities of Women's Committee MahaIAP

The Added Pictures of Women's Committee, along with President Mahaiap Dr Ramakant Patil Sir & Secretary Dr Amol Pawar Sir, at Midterm CME Buldhana 27th May23

Activities of Women's Committee MahaIAP

IAP Amravati Hematology Module on 28th May 23. The Experts were Dr Dipti Jain, Dr Pankaj Dwiwedi, Dr Atish Bakane, Dr Anju Mehrotra. President Dr Kausthubh Deshmukh & Secretary Dr Nitin Raut.

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Activities of Women's Committee MahaIAP

April & May Tuesday Takes Sessions

IAP Nagpur

ACADEMY OF PEDIATRICS
COMHAD
SANMVEDANA SCHOOL
WORLD AUTISM DAY - 2 April 2023

MESSAGE

Many times we see children with special needs...but there are certain children where their disability is not clearly seen, but felt, is AUTISM. Autism Spectrum Disorder is type of developmental disability which is now being recognised and identified commonly in recent times.

It is a condition which needs a comprehensive management but parents also need support. World Autism Day is an occasion to create awareness about this unique condition.

Newsletter have capacity to reach to many, and it is a pleasure for me to give my best wishes and blessings to all the contributors and team of this newsletter.

I also appreciate and recognise the role of pediatricians as a core member of team for the management of autism and AOP Nagpur has always been supportive for such endeavours.

I also appreciate Mrs Phadke madam, Kanchan Gokhale madam for their initiative to start the school for students with autism and run the school despite all the difficulties.

I appeal parents to stay connected with their pediatrician ,show full trust in them and be brave to help their child integrate in the society.

On this occasion...I wish to congratulate DR JAYASHREE SHIWALKAR who has taken lot of efforts to compile and edit this useful newsletter. I wish to appreciate Dr Sanjay Pakhmode, President AOP and Dr Yogesh Tembekar, secretary AOP for taking initiative to publish this newsletter, I also appreciate the efforts of Mrs Phadke madam, Principal Sanmvedana school and Mrs Kanchan Gokhale for their contribution to this newsletter.

Dr. Uday Bodhankar
Patron IAP & Advisor AHA Nagpur
Executive Director COMHAD
Adjunct associate professor Pediatrics - Sydney university
International Council Member - ASPR-Japan
Nodal officer - RCPCH - DCH - UK Ramdaspeth,Nagpur - 440 012 India

EDITORIAL

It is my great pleasure to edit this newsletter on the occasion of 'world autism awareness day'. Newsletters are a great medium for the experts to connect with the parents to share their views and expertize. It also gives opportunity for parents to share their concerns and experience with others.

I am extremely thankful to Dr. Sanjay Pakhmode, President AOP and Dr. Yogesh Tembekar, Secretory AOP, Nagpur for taking initiative and supporting this newsletter. I am thankful to Dr. Uday Bodhankar sir for his words of blessing and always encouraging the activities.

This newsletter is published in association with "Sanmvedana-School for students with autism" Nagpur. I am extremely thankful to Mrs. Phadke madam, principal and Mrs Kanchan Gokhale for their participation in publishing the newsletter.

As well, i am thankful to all the contributors, who have taken lot of efforts and send their article, write ups and poems.

I extend my 'greetings' to all on this occasion and wish to convey that all the experts are with parents always and they can be contacted anytime by the parents.

Last but not the least, I am thankful to shri. Mangesh Wadhai for printing this newsletter.

Dr. Jayashree Shiwalkar
M.B.B.S., Dch., M.Sc. (Human Development)
Developmental paediatrician
adolescent counsellor

FROM PRESIDENT'S DESK

When an affectionate, babbling, toddler suddenly becomes silent, withdrawn, self abusive or indifferent to social overtures, something is wrong. Parents need to remember that your own observations & concern about your child's development will be essential in helping to screen your child. The core features are impaired social interaction, impaired verbal & nonverbal communication & restricted & repetitive patterns of behavior. It is important for all of us to try to understand children with autism spectrum disorder (ASD) & learn to coexist with them. Specific themes determined each year by United Nations are focused on important autism related issues such as : "Employment: The Autism Advantage" or Inclusion in the Workplace. It gives me immense pleasure to release News letter on this World Autism Day. As President AOP 2023.

I thank Dr. Jaya Shivalkar, EB 2023 for making of this News Letter. I also thank our Patron Dr. Uday Bodhankar sir for guiding us. I thank our Secretary Dr. Yogesh Tembhekar & Team 2023 .

Dr. Sanjay Pakhmode
President - AOP, Nagpur.

NEWSLETTER RELEASE

IAP Nagpur

Autism Awareness Programme

IAP Nagpur

3rd Clinical Meet- 16th April

IAP Nagpur

World Hemophilia Day- 17th April

IAP Navi Mumbai

IAP Navi Mumbai











IAP Navi Mumbai

IAP Navi Mumbai


'Rats had a hand in creating longest-running Omicron variant'

INTERPRETING THE OMICRON DRAMA

IAP Jalandhar

1. **Immunisation week :** To celebrate the Immunisation week, a poster making competition was organised by department of Pediatrics PIMS, Jalandhar. Nursing students of MHR DAV college educated the parents about the importance of routine as well as catch up vaccination. Best ones were rewarded by Dr Rajiv Arora , Principal PIMS, HOD Paediatrics Dr HS Bains and Secretary JAP Dr Anuradha Bansal

IAP Jalandhar

2. Dr Surjeet Madan organised an NRP sensitisation workshop for staff nurses of PMG Hospital

IAP Jalandhar

3. World Thalassemia May 8 2023

"Be Aware, Share, Care- Strengthening Education to Bridge Thalassemia care gap"

1. On May 8, 2023, Jalandhar Academy of Pediatrics in association with Thalassemia unit Civil Hospital and Aagaaz NGO organised a Thalassemia awareness camp for parents of children with Thalassemia. President Jalandhar Academy of Pediatrics Dr Rohit Chopra discussed about the importance of prenatal counselling of couples & antenatal screening for the ones planning a pregnancy. He urged the parents of Thalassemic children to share this information with their neighbours and relatives to spread the word MO Civil Hospital Dr SS Nangal is doing a commendable job by providing free and timely Stem cell transplant to thalassemic children. Dr Anuradha Bansal , Secretary JAP, Dr Karan Markanda & Dr Munish and Mr Bhatia from NGO AAGAAZ distributed stationary kits and refreshments to children with Thalassemia

IAP Jalandhar

4. **BLS Mass Awareness:** A 3 -day BLS Mass Awareness was organised for nursing students of MHR DAV College. 110 nursing students were trained in skills of BLS by Course Director Dr HS Bains and Course Coordinator Dr Anuradha Bansal




IAP Jalandhar

5. **Basic NRP Workshop:** To raise awareness about NRP among obstetricians, a basic NRP workshop was organised for obstetric nurses and residents of Civil Hospital Jalandhar on May 18, 2023. 24 candidates were trained in skills of Neonatal Resuscitation by Dr HS Bains, Dr Anuradha Bansal & Dr Anupma Saggar




IAP Jalandhar

6. **BLS for Healthcare Providers:** On May 24, 2023, a BLS workshop was organised for Healthcare Providers at PIMS Jalandhar. 30 participants were trained in skills of BLS. Course Director: Dr HS Bains

Course Coordinator: Dr Anuradha Bansal. Coinstructors: Dr Pushwinder Kaur & Dr Navdeep Chhabra






IAP Kerala

Infant Death audit - IAP Palakkad

Ped Dermacon IAP Kannur

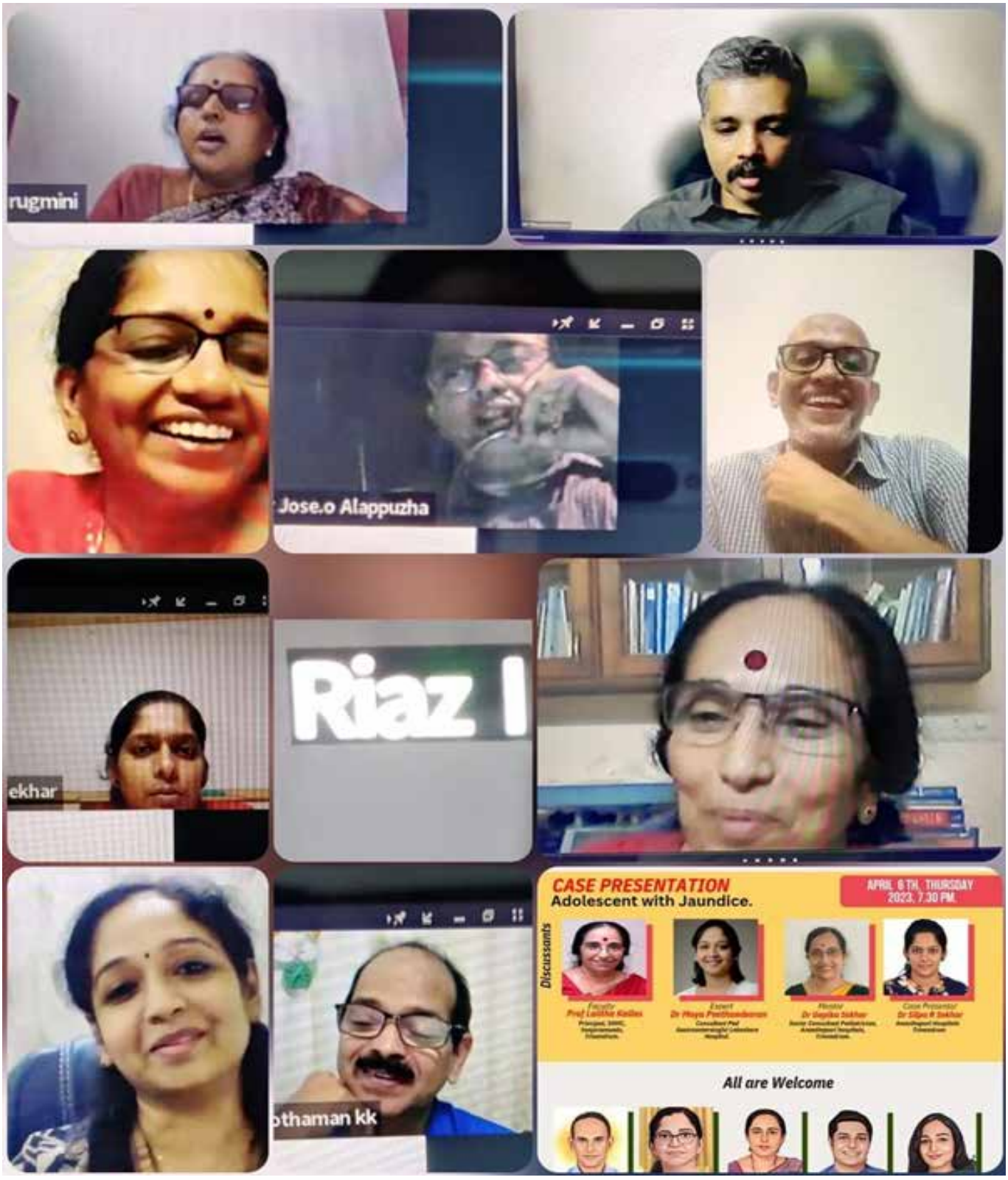
IAP Kerala

ECD NC Program - IAP Wayanad

IAP Kerala

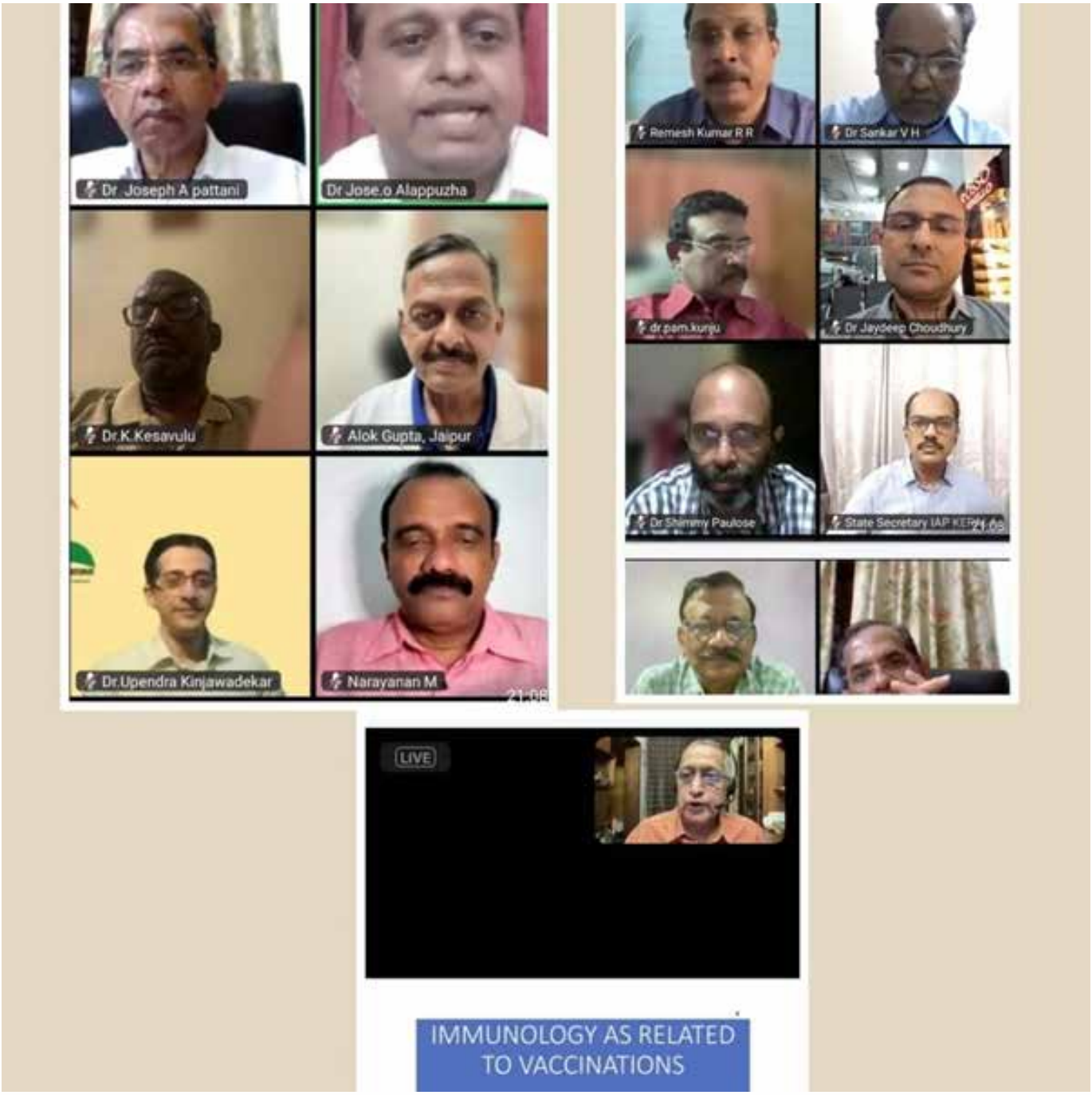
Ped Cardiology CME - IAP Trivandrum

IAP Kerala



PG Club IAP Trivandrum

IAP Kerala



Vaccinology course inaugration

IAP Kerala




Autism day programme - IAP Kollam

IAP Kerala

Autism day programme - IAP Vadakara

IAP Kerala

Autism day programme - IAP Vadakara