Stress in Adolescents
Objectives

• Comprehend the term “Stress” and its connection with adolescence
• Appreciate the reason to focus on adolescent stress
• Perceive the difference between stress response in adolescents and adults
• Recognize common stressors and their impact on adolescents
• Identify the warning signs of stress in adolescents
• Relate adolescent behavior to the various coping mechanisms
• Discuss the approach and management of stress in adolescents
Hans Selye in 1936, defined stress as “the non-specific response of the body to any demand for change”.

The demand for change is “Adolescence” itself.
Focus on Stress in Adolescence

• Adolescence itself is a challenge
• Changes affect psychological functioning
• Heightened stress response in teens
• Ability to cope is influenced by environment and genetic factors
• Those with supportive environment cope well; unhealthy environment makes them vulnerable
Yerkes Dodson Curve

- Intensity
- Fatigue
- Exhaustion
- Anger/panic
- Breakdown
- Too little stress
- Optimum stress
- Too much stress
- Burnout

Performance Curve
- Peak performance
- Healthy tension
- Exhaustion
- Breakdown and burnout

Performance vs. Arousal
- Drone Zone
- Performance improving
- Creative calm
- Fatigue zone
- Ill health
- Panic & anxiety

Presidential Action Plan 2018-19
Precious Teens Precious Lives
Situational Analysis

It’s not just stress but its consequence that impacts the lives of Adolescents

• The prevalence of psychiatric morbidity (Indian studies) 14.4% to 31.7%.
• Global prevalence 20-45%.
• Higher prevalence of depression in females than males, attributed to hormonal changes at menarche.
• Adolescents with high stress level are associated with having a high number of depressive symptoms and suicidal attempts.
The Teenage Brain: The Stress Response and the Adolescent Brain Russell D. Romeo
Department of Psychology and Neuroscience and Behaviour Program, Barnard College of Columbia University, New York, NY 10027, Curr Dir Psychol Sci. Author manuscript; available in PMC 2014 December 23
Adolescents are Vulnerable to Stress
Stressors

Competition and violence

Thrills

Friendships, bullying and peer pressure
Stressors

Relationships
Stressors

Contemplation over experimentation
Stressors

Academic

Career decisions
Stressors

Body Image
Stressors

Media
Stressors

Family Conflicts
Stressors

Pubertal Changes

Age 8  Age 19
Age 9  Age 19
"A body goes through changes during the teen years. When you started dating, my hair turned gray. When you started driving, I got heart palpitations..."

"Morale is worse than we thought. A computer just signed up for our stress management workshop!"
Coping with Stress

• Common reactions are excitement, anger, fear, sadness.
  • Each adolescent reacts differently

Effective Coping Methods

• Problem solving
• Managing emotions: Avoidance, distraction, relaxation, blowing off steam
Symptoms & Signs of Distress

- Increased complaints of headache, stomachache, muscle pain, tiredness
- Shutting down and withdrawing from people
- Increased anger or irritability; i.e., lashing out at people and situations
- Crying more often and appearing tearful
- Feelings of hopelessness
- Chronic anxiety and nervousness
- Changes in sleeping and eating habits, i.e., insomnia or being "too busy" to eat
- Difficulty in concentrating
- Deterioration in scholastic performance
Assessment of Stress
HEEADSSSS Psychosocial History

Questions to ask in history

1. Recent traumatic events: break up of a relationship, death of a loved one or family discordance?
2. Is your teenager being teased?
3. Over scheduling of activities?
4. Has frequent headaches, fatigue & low motivation?
5. Any uncontrolled emotions?
## Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

**Name_________________________ Date_________________________**

**Age__________ Gender (Circle): M F Other__________**

- 0 = Never
- 1 = Almost Never
- 2 = Sometimes
- 3 = Fairly Often
- 4 = Very Often

<table>
<thead>
<tr>
<th>Score</th>
<th>Perceived stress level</th>
<th>Health concern level</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-7</td>
<td>Much lower than average</td>
<td>Very low</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8-11</td>
<td>Slightly lower than average</td>
<td>Low</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12-15</td>
<td>Average</td>
<td>Average</td>
<td>20</td>
<td>11</td>
<td>31</td>
</tr>
<tr>
<td>16-20</td>
<td>Slightly higher than average</td>
<td>High</td>
<td>25</td>
<td>30</td>
<td>55</td>
</tr>
<tr>
<td>21 and above</td>
<td>Much higher than average</td>
<td>Very high</td>
<td>14</td>
<td>37</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>60</td>
<td>83</td>
<td>143</td>
</tr>
</tbody>
</table>

Chi-square test: 4.49, $P < 0.05$
Adolescent Stress Questionnaire

ASQ-S items

Factor 1. Home Life
  Item 1. Disagreements between you and your father
  Item 2. Not being taken seriously by your parents
  Item 4. Little or no control over your life
  Item 13. Abiding by petty rules at home
  Item 27. Disagreements between your parents
  Item 29. Arguments at home
  Item 33. Living at home
  Item 35. Disagreements between you and your mother
  Item 42. Lack of trust from adults
  Item 44. Parents expecting too much from you
  Item 46. Lack of understanding by your parents
  Item 47. Parents hassling you about the way you look

Factor 2. School Performance
  Item 5. Having to study things you do not understand
  Item 6. Teachers expecting too much from you
  Item 9. Keeping up with schoolwork
  Item 12. Difficulty with some subjects
  Item 14. Having to concentrate too long during school hours
  Item 15. Having to study things you are not interested in
  Item 41. Pressure of study

Factor 3. School Attendance
  Item 3. Getting up early in the morning to go to school
  Item 31. Compulsory school attendance
  Item 37. Going to school

Factor 4. Romantic Relationships
  Item 16. Being ignored or rejected by the person you want to go out with
  Item 25. Making the relationship with your boy-/girlfriend work
  Item 38. Not having enough time for your boy-/girlfriend
  Item 50. Getting along with your boy-/girlfriend
  Item 56. Breaking up with your boy-/girlfriend

Factor 5. Peer Pressure
  Item 8. Being hassled for not fitting in
  Item 26. Being judged by your friends
  Item 28. Changes in your physical appearance with growing up
  Item 30. Pressure to fit in with peers
  Item 34. Insatisfaction with how you look
  Item 52. Peers hassling you about the way you look
  Item 54. Disagreements between you and your peers

Factor 6. Teacher Interaction
  Item 17. Disagreements between you and your teachers
  Item 23. Not getting enough timely feedback on schoolwork
  Item 39. Teachers hassling you about the way you look
  Item 40. Abiding by petty rules at school
  Item 43. Not being listened to by teachers
  Item 53. Lack of respect from teachers
  Item 55. Getting along with your teachers

Factor 7. Future Uncertainty
  Item 7. Concern about your future
  Item 19. Putting pressure on yourself to meet your future goals
  Item 32. Having to make decisions about future work or education

Factor 8. School/Leisure Conflict
  Item 18. Not having enough time for fun
  Item 21. Not getting enough time for leisure
  Item 22. Having too much homework
  Item 24. Not enough time for activities outside of school hours
  Item 51. Lack of freedom

Factor 9. Financial Pressure
  Item 20. Pressure to work to make more money
  Item 36. Not enough money to buy the things you want
Assessment of Stress

• Screen for Mental Disorders: Mental status examination, Beck’s depression inventory, SCARED tool for anxiety, screen for suicide
• Autonomic functions: Heart Rate Variability
• Salivary and serum cortisol levels
Basics of Stress Management

- Visualize and practice feared situations
- Focus on what you can control and let go of what you cannot
- Work through worst-situations
- Lower unrealistic expectations
- Be helpful. Contribute to social/community welfare activities
Basics of Stress Management

- Schedule breaks and enjoyable activities
- Accept yourself as you are
- Identify your unique strengths and build on them
- Give up on the idea of perfection
- Parents, teachers and adults to partner with adolescents to help them to handle stress
Case 1

14 years old boy, 9th standard student, is brought with poor academic performance since a month. Parents complain that he's very silent and does not disclose failures until the school informs the parents. He is not interested in Mathematics and refuses to go for tuition, which they consider is very important if he has to enter IIT. He is keen to play tennis and wastes time in watching matches. He becomes very argumentative, aggressive and angry if confronted. Behavioral changes are since 1 week.
**Assessment - HEEADSSS**

<table>
<thead>
<tr>
<th>Home and environment</th>
<th>High expectations from parents, lack of communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and employment</td>
<td>Academic stress, School pressure</td>
</tr>
<tr>
<td>Activities</td>
<td>Attending classes without time for hobby</td>
</tr>
<tr>
<td>Drugs</td>
<td>Nil</td>
</tr>
<tr>
<td>Sexuality</td>
<td>Nothing relevant</td>
</tr>
<tr>
<td>Suicide / Depression</td>
<td>Being silent</td>
</tr>
</tbody>
</table>

**Negative coping mechanism:** Withdrawal, Anger, Aggression, Defiance
Management

• **Individual counseling**
  – To understand the difficulty
  – Self confidence
  – Relaxation techniques
  – Group activities

• **Parental counseling**
  – To understand the child’s difficulty
  – Tackle the cause
  – Avoid high expectations
  – allowing time for his hobby - Tennis

• **School support**
  – Professionals and parents can talk to school for academic support
Essentials of Stress Management

• Skills to Maintain a Healthy Lifestyle
  Adequate nutrition, sleep, exercise, prayer, meditation, study skills, healthy media usage

• Life Skills
  Self esteem, coping skills, problem solving, interpersonal

• Relaxation Skills
  Breathing exercises, yoga, guided imagery, progressive muscular relaxation, hobbies, laughter club

<table>
<thead>
<tr>
<th>5 meals</th>
<th>&lt; 2 hr screen time</th>
<th>1 hr of physical activity that makes you sweat</th>
<th>8 glasses of water and 8 hours of sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 major 2 helpings fruits and veggies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Precious Teens Precious Lives
Parental Counseling

- Be aware of the teen’s emotions and behavior
- Give family support with love
- Encourage healthy friendship
- Help in developing knowledge and skills to cope with difficulties and support unconditionally
- Actively listen
- Teach problem solving
Parental Counseling

• Keep communication channels open. Parents to be available

• Be a role model

• Help to select a appropriate extra curricular activity

• Monitor time and content viewed on internet

• Channelize the energy of adolescents
Case 2

13 years old girl studying in 8th standard lives with her divorced mother. Mother has noticed change in her behavior, appearance and attitude since 10 days. School performance has deteriorated, is often coming late from school and is found with a new set of boy friends. Concerned about her physical appearance and avoids eating. Often found speaking and texting through her mobile. Prefers to remain in her room and is up late in the night. Looks tired and nervous every morning. When questioned becomes very angry, aggressive and threatens to run away from home.
### Assessment - HEEADSSSS

<table>
<thead>
<tr>
<th>Home and environment</th>
<th>Single parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and employment</td>
<td>Poor Scholastic performance, Peer pressure</td>
</tr>
<tr>
<td>Eating</td>
<td>Missing meals, poor body image</td>
</tr>
<tr>
<td>Activities</td>
<td>Poor sleep, excessive media usage, new friendships late from school</td>
</tr>
<tr>
<td>Drugs</td>
<td>Smoked once</td>
</tr>
<tr>
<td>Sexuality</td>
<td>Sexually active</td>
</tr>
<tr>
<td>Suicide / Depression</td>
<td>Remains alone in room</td>
</tr>
</tbody>
</table>

**Negative coping mechanism:** Anger, aggressiveness, truancy
Case Analysis

- The cause for stress is negative peer pressure, poor self image, substance abuse
- Adolescents seek refuge in peer groups in the absence of family support.
- They feel that peer group satisfy their needs
- Fear of poor acceptance in the peer group or peer pressure makes them indulge in risk taking behavior here substance abuse, sexual experimentation
- Poor body image can lead to eating disorders
Management

• Individual counseling
  – Building self confidence
  – Nurture effective communication with the parents / teachers
  – Manage substance use
  – Safe sexual behaviour

• Parental Counselling

• School Support
Stress Busters

• Time management

• Talk it aloud, with a friend

• Take deep breaths – I can handle this

• Break tasks into smaller, manageable chunks

• Identify your unique strengths

• Take ‘charge’

• It is okay to ‘make mistakes’: learn from mistakes
Case 3

12 year old girl studying in 7th standard, newly diagnosed as Type I DM. Put on insulin and dietary restrictions. Mother complained that since 1 week, she refuses to take insulin, is absent from school frequently, has low self-esteem, anger, frustration and social withdrawal. She constantly talks about the disease causing early death. Is found reading and googling a lot about diabetes mellitus.
## Assessment - HEEADSSSSS

<table>
<thead>
<tr>
<th>Home and environment</th>
<th>Good family support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and employment</td>
<td>School absenteeism</td>
</tr>
<tr>
<td>Activities</td>
<td>Always spending on internet and books on DM</td>
</tr>
<tr>
<td>Drugs</td>
<td>Insulin</td>
</tr>
<tr>
<td>Suicide / Depression</td>
<td>Talks about Death due to Diabetes</td>
</tr>
<tr>
<td>Safety</td>
<td>Having insulin</td>
</tr>
</tbody>
</table>

Negative coping mechanism: Withdrawal, anger, no social interaction, excessive media use
Case Analysis

• Stressor is chronic medical illness
• Struggling to accept the illness
• Management
  – Parental counseling
  – Individual counseling
  – Motivational interview
  – Referring to supportive group
  – Group therapy (ask to talk to people with similar illness)
  – Regular counseling to improve the self esteem and self confidence
  – Close follow up: ? Emerging depressive disorder
  – Reference to psychologist and psychiatrist required
Key Messages

- All adolescents should learn stress management skills
- Parents, teachers and health care providers are the key stakeholders
- Excessive stress; distress, can lead to impaired learning, poor health and risky behavior like drug use, violence, truancy and self harm
- Recognition and management of adolescent stress is essential to prevent suicide
- Pediatricians play a vital role in recognizing and managing stress
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