STRESS : MANAGEMENT AND CURRENT TRENDS

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Taking you from Distress to De-stress
OVERVIEW

- INTRODUCTION
- THE FIGHT FLIGHT RESPONSE
- HOW DOES STRESS AFFECT US?
- SIMPLE STRESS COPING STRATEGIES
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INTRODUCTION

RECOGNISING STRESS
That ‘bridge collapse’ in a human being can take many forms:

- Maladaptive responses to stress:
  - POST TRAUMATIC STRESS DISORDER
  - CARDIOVASCULAR DISEASE
  - THE METABOLIC SYNDROME: ESSENTIAL HYPERTENSION, TYPE 2 DIABETES, HYPERLIPIDEMIA, OBESITY
  - DEPRESSION
  - ANXIETY DISORDERS

- It is not the stressor that causes stress but the individual’s perception and emotional reaction to it.
Some signs of a bowing and buckling bridge to look out for:

- Being more accident prone
- Forgetting things
- Showing a negative change in mood or fluctuations in mood
- Avoiding certain situations or people
- Using more negative or cynical language
- Becoming withdrawn
- Showing a prolonged loss of sense of humour
- Becoming increasingly irritable or short-tempered
- Having more arguments and disputes
- A tendency to suffer from headaches, nausea, aches and pains, tiredness and poor sleeping patterns
- Indecisiveness and poor judgement
- A problem with drinking or drug taking
- Looking haggard or exhausted all the time
FIGHT OR FLIGHT RESPONSE

- During **dangerous situations**, through the release of hormones such as **adrenaline**, **cortisol** and **norepinephrine**, heart pounding, fast breathing sensation as well as a **boost of energy**, enables us to focus our attention so we can quickly respond to the situation.

- In today’s world, the ‘fight or flight’ mode can still **help us survive dangerous situations**, for example, reacting swiftly to a person running in front of our car by slamming on the brakes.
Fight

When our body goes into a state of stress, you may feel agitated and aggressive towards others. This is because our bodies naturally go into a state of “fight”, which can be a helpful reaction to ward off predators. In most situations of our modern day lives, however, it can negatively affect relationships and even ruin reputations.

Flight

Another natural reaction is to go into a state of “flight”, which can be a useful mode of survival, for example, when we find ourselves in dangerous surroundings. In everyday life, however, we are often unable to run away and when we do, we realise that the stressor is quick to catch up with us.

Freeze

For some people, becoming stressed sets the stage for ‘dysregulation’. In this case, the energy mobilised by the perceived threat gets “locked” into the nervous system and we ‘freeze’. This response sometimes reveals itself when we breathe. Holding our breath and shallow breathing in stressful situations are both forms of freeze. The occasional deep sigh is the nervous system catching up on its oxygen intake.

Aggression

Run Away

Deer in headlights
The challenge is when our body goes into a state of stress in inappropriate situations.

If we are kept in a state of stress for long periods, it can be detrimental to our health. The results of having elevated cortisol levels can be an increase in sugar and blood pressure levels, and a decrease in libido.
How does stress affect us?

Cognitive
- Memory problems
- Poor judgement
- Inability to concentrate
- Indecisiveness

www.stress.org.uk
HOW DOES STRESS AFFECT US?(contd.)

Emotional

- Frustration
- Aggressive
- Judgemental
- Depression
- Mood swings
- Irritability

www.stress.org.uk
HOW DOES STRESS AFFECT US? (contd.)

Physical

- Frequent Colds
- Teeth grinding
- Headaches & migraines
- Chest Pain
- Rapid Heartbeat
- Aches and Pains

www.stress.org.uk
HOW DOES STRESS AFFECT US? (contd.)

Behavoural

Loss of sense of humour
Demotivated
Loss of pride in appearance
Increase Intake in Alcohol, Cigarettes and Caffeine to Relax
Isolating Yourself from Others
Sleeping too Little or too Much

www.stress.org.uk
Physical or mental stresses may cause physical illness as well as mental or emotional problems. Here are the parts of the body affected by stress:

**Hair:**
High stress levels may cause excessive hair loss and some forms of baldness.

**Muscles:**
Spasmodic pains in the neck and shoulders, musculoskeletal aches, lower back pain, and various minor muscular twitches and nervous tics are more noticeable under stress.

**Digestive tract:**
Stress can cause or aggravate diseases of the digestive tract including gastritis, stomach and duodenal ulcers, ulcerative colitis, and irritable colon.

**Skin:**
Some individuals react to stress with outbreaks of skin problems such as eczema and psoriasis.

**Brain:**
Stress triggers mental and emotional problems such as insomnia, headaches, personality changes, irritability, anxiety, and depression.

**Mouth:**
Mouth ulcers and excessive dryness are often symptoms of stress.

**Heart:**
Cardiovascular disease and hypertension are linked to accumulated stress.

**Lungs:**
High levels of mental or emotional stress adversely affect individuals with asthmatic conditions.

**Reproductive organs:**
Stress affects the reproductive system causing menstrual disorders and recurrent vaginal infections in women and impotence and premature ejaculation in men.


Recognising Stress At Work

Certain factors at work may indicate a potential problem:

- An increase in absenteeism (sick leave)
- Presenteeism (attending work while sick)
- Leavism (taking leave to catch up on work)
- Arguments and disputes with colleagues
- A tendency to work late and not take breaks
- A loss of sense of humour, replaced by irritability
- A decrease in work standards
- Indecisiveness and poor judgement
- A problem with drinking or drug taking
- More accidents at work
- A tendency to suffer from headaches, nausea, aches and pains, tiredness and poor sleeping patterns
SIMPLE STRESS COPING STRATEGIES
SIMPLE STRESS-COPING STRATEGIES

- Get enough sleep
- Sleep is essential for the body to function properly. Adults can adopt helpful sleep-enhancing routines.

www.stress.org.uk
SIMPLE STRESS-COPING STRATEGIES (contd.)

- Listen to music
- Music can be used in many situations to help reduce stress and create a calming atmosphere:
  - Use classical music to concentrate as it is peaceful, harmonious and doesn’t have lyrics.
  - Music can also be a reminder to take breaks.
  - When using music to help you relax before sleep, choose soothing music with monotonous repetition, such as sounds of nature or ambient music.

www.stress.org.uk
Manage your time optimally

Stress often results from difficulty in coping with day-to-day problems and conflicting responsibilities.

A useful strategy for dealing with a sense of being overwhelmed by all the things that need attention is prioritizing and diarizing.

Create time buffers to deal with unexpected emergencies – this is a great way to prepare and avoid excess stress.

www.stress.org.uk
If you’re ill, rest

Learn to say ‘no’

- Where a ‘no’ is the appropriate response, say it without guilt. ‘No’ also doesn’t have to be a decline, it can also be a ‘negotiation opportunity’, e.g. “I can’t do that now, but I can do it in next week”.

Work off stress with physical activity
SIMPLE STRESS-COPING STRATEGIES (contd.)

- Hobbies
- Avoid nicotine, alcohol, caffeine and refined sugar products
- Take Breaks
- Working in 90-minute cycles with breaks in-between can help optimize productivity and can help shorten the time it takes to complete a task.
Talk to someone

We’ve all heard of the saying “a problem shared is a problem halved”

If you are troubled by something, don’t suppress it. Instead:

- Speak to a friend or family member
- If you don’t feel comfortable speaking to a loved one or if you feel your stress is putting you at risk, visit us.

www.stress.org.uk
In the late 1960’s, at Harvard Medical School, Herbert Benson, M.D. found a counterbalancing mechanism to the stress response.

Stimulating an area of the hypothalamus can cause the stress response, activating other areas of the brain results in its reduction.

This opposite state - THE RELAXATION RESPONSE.
THE RELAXATION RESPONSE (contd.)

- Relaxation response - physical state of deep rest that changes the physical and emotional responses to stress.

- When eliciting the relaxation response:
  - Metabolism decreases
  - Heart beats slower and muscles relax
  - Breathing becomes slower
  - Blood pressure decreases
  - Calmer state of being achieved

Elicitation of the relaxation response is easy.

There are two essential steps:

1. **Repetition** of a word, sound, phrase, prayer, or muscular activity.
2. Passive disregard of everyday thoughts that inevitably come to mind and the return to the repetition.
Regular elicitation of the relaxation response has been scientifically proven to be an effective treatment for stress-related disorders.

Other techniques for evoking the relaxation response are:
- Mindfulness Meditation
- Progressive Muscle Relaxation
- Deep Breathing
- Imagery
- Self-Massage

STRESS COPING STRATEGIES THAT CAN BE INITIATED/SELF-TAUGHT
Mindfulness is the quality of being fully engaged in the present moment, without over-thinking or analyzing the experience.

It switches the focus on what is happening right now, rather than worrying about the future or dwelling on the past.

It takes effort to maintain concentration and to bring it back to the present moment when mind wanders or drifts off.

With regular practice:

- Strengthens the areas of the brain associated with joy and relaxation
- Provides a potentially powerful antidote to the common causes of daily stress.

Mindfulness meditation techniques:

- **Body Scan** - Focusing **attention on various parts of the body.** Like progressive muscle relaxation, start with feet and work way up.

- **Walking Meditation** - Mindfulness involving **focus on the physicality of each step;** the sensation of feet touching the ground; the rhythm of breath while moving.

- **Mindful Eating** – If one reaches for food when stressed, or gulps meals down in a rush, try eating mindfully.

Relax in a Hurry

Mini-relaxation exercises help reduce anxiety and tension immediately. They can be done anywhere, any time, and no one needs to know!

The basic method for doing is quite simple:

- Put your hand just below your navel. Take a deep breath, bringing the air in through your nose and through your mouth. You should feel your stomach rising about an inch as you breathe in, and falling about an inch as you breathe out.

- This is **diaphragmatic breathing**.
PROGRESSIVE MUSCLE RELAXATION

- Effective and widely used strategy for stress relief.
- Technique for reducing overall body tension.
- It involves a two-step process in which you tense and relax different muscles in the body.
- With regular practice, helps recognize what tension as well as complete relaxation feels like in different parts of the body.
- This awareness helps spot and counteract the first signs of the muscular tension that accompanies stress.
DEEP BREATHING TECHNIQUES

- Individuals tend to breathe shallowly or even hold breath when feeling anxious.
- The key to deep breathing is to breathe deeply from the abdomen, getting as much air as possible into your lungs.
- The importance of good posture cannot be overstated.
- There are many ways to practice deep breathing.
GUIDED IMAGERY

- Convenient and simple relaxation technique that can help quickly and easily manage stress and reduce tension.

- When used as a relaxation technique, it involves imagining a scene in which one feels at peace, free to let go of all tension and anxiety. One can choose whatever setting is most calming, whether a favorite childhood spot, a therapist’s chair, or a quiet place.

SELF-MASSAGE TECHNIQUES

Scalp Soother – Place your thumbs behind your ears while spreading your fingers on top of your head. Move your scalp back and forth slightly by making circles with your fingertips for 15-20 seconds.

Easy on the Eyes – Close your eyes and place your ring fingers directly under your eyebrows, near the bridge of your nose. Slowly increase the pressure for 5-10 seconds, then gently release. Repeat 2-3 times.

Sinus Pressure Relief – Place your fingertips at the bridge of your nose. Slowly slide your fingers down your nose and across the top of your cheekbones to the outside of your eyes. Repeat 3-4 times.

Shoulder Tension Relief – Reach one arm across the front of your body to your opposite shoulder. Using a circular motion, press firmly on the muscle above your shoulder blade. Repeat on the other side.
THOUGHT STOPPING TECHNIQUES

- Thought stopping requires **consistent motivation**.
- Select a thought that one feels strongly committed to extinguishing.
  - Imagine the Thought
  - Thought Interruption
  - Unaided Thought Interruption
  - Thought Substitution

OTHER STRESS COPING STRATEGIES THAT CAN BE INITIATED/SELF-TAUGHT

- Breathing Retraining and Exercise
  - Whole-Body Breathing
  - Exercise Therapy
- Methods Based on Eastern Meditative and Therapeutic Disciplines
  - Mindfulness Meditation
  - Qigong Therapy
  - Yoga
- Other Methods
  - Music Therapy
  - Eye Movement Desensitization and Reprocessing
OVERVIEW OF PSYCHIATRIC STRESS MANAGEMENT METHODS
OVERVIEW OF PSYCHIATRIC STRESS MANAGEMENT METHODS

- BIOFEEDBACK
- NEUROFEEDBACK
- AUTOGENIC TRAINING METHOD
- AUTOGENIC BIOFEEDBACK TRAINING
OVERVIEW OF PSYCHIATRIC STRESS MANAGEMENT METHODS (contd.)

- COGNITIVE METHODS
- STRESS INOCULATION TRAINING
- PHARMACOLOGICAL APPROACH TO STRESS MANAGEMENT AND ANXIETY DISORDERS
CURRENT TRENDS IN STRESS MANAGEMENT
There are an increasing number of studies that have monitored the impact of Stress Management Interventions (SMIs).

### Levels of Stress Management Interventions and Examples of Specific SMIs

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<th>Intervention Level</th>
<th>Examples of specific SMI and classification code</th>
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<td>Individual</td>
<td>Relaxation (REL)</td>
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<td>Meditation (MED)</td>
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<td>Biofeedback (BIO)</td>
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<td>Cognitive-behavioural Therapy (CBT)</td>
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<td>Exercise (EXE)</td>
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<td>Employee Assistance Programs (EAP)</td>
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<td>Other Individual Level Interventions (OTI)</td>
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<td>Individual / Organisational</td>
<td>Co-worker Support Groups (CSG)</td>
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<td>Person Environment Fit (PEF)</td>
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<td>Role Issues (RiS)</td>
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<td>Participation and Autonomy (PAR)</td>
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<td>Organisational</td>
<td>Selection and Placement (SAP)</td>
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<td>Training and Education Programs (TRA)</td>
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<td>Physical and Environmental Characteristics (PEC)</td>
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<td>Communication (COM)</td>
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<td>Job Redesign/Restructuring (JRD)</td>
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<td>Other Organisational Level Intervention (OTO)</td>
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CURRENT TRENDS IN STRESS MANAGEMENT (contd.)

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<th>Category</th>
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CURRENT TRENDS IN STRESS MANAGEMENT FOR MEDICAL STUDENTS
CURRENT TRENDS IN STRESS MANAGEMENT FOR MEDICAL STUDENTS

Proposed model of causes and consequences of student distress

PERSONAL FACTORS
- Life events (birth of child, death in family, etc)
- Personality
- Coping strategies
- Personal responsibilities (married, children, etc)
- Consumer debt
- Learning style
- Motivation

POTENTIAL PERSONAL CONSEQUENCES
- Broken relationships
- Substance abuse
- Poor self-care (lack of exercise, poor diet, etc)
- Decline in physical health
- Suicide

STUDENT DISTRESS
- Stress
- Anxiety
- Burnout
- Depression

POTENTIAL PROFESSIONAL CONSEQUENCES
- Impaired academic performance
- Cynicism/decline in empathy
- Academic dishonesty
- Impaired competency
- Influence specialty choice
- Attrition from medical school
- Medical errors

FACTORS RELATED TO MEDICAL SCHOOL TRAINING
- Workload
- Curriculum
- Exposure to patient death/suffering
- Student loan debt
- System of performance evaluation (letter grade, pass/fail, etc)
- Ethical conflicts
- Student abuse (verbal, emotional, etc)
- Institutional culture
- Hidden/informal curriculum

Academic leaders have recognized the importance of developing stress-management programs for medical students.

Randomized, controlled trials or controlled, non-randomized trials reviewed show that:

- Interventions that have been undertaken and found effective for stress management amongst medical students were:
  - Self-hypnosis
  - Meditation
  - Mindfulness-based stress-reduction
  - Feedback on various health habits
  - Educational discussion
  - Changes in the length and type of curriculum
  - Changes in the grading system

CURRENT TRENDS IN STRESS MANAGEMENT FOR MEDICAL STUDENTS (contd.)

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<th>Name of intervention</th>
<th>Outcome</th>
<th>Summary of outcome (n)</th>
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<tr>
<td>Zeitlin et al (2000), US.</td>
<td>Massage therapy</td>
<td>- Reduced respiratory rate</td>
<td>- Improved psychological health (3)</td>
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<td>- Decreased anxiety state.</td>
<td>- Improved immunologic health marker (1)</td>
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<td>- Decreased perceived stress</td>
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<td>- Decreased percentage of T Lymphocyte cells post intervention</td>
<td>- Increased awareness about stress, its effect and management (1)</td>
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<td>- Increased natural killer cell activity post intervention.</td>
<td>- Well accepted intervention (1)</td>
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<td>Yusoff &amp; Rahim (2010), Malaysia.</td>
<td>The Medical Student Wellbeing Workshop</td>
<td>- Reduced distress symptoms.</td>
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<td>- Well accepted intervention.</td>
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<td>- Rated as highly useful and successful intervention.</td>
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<td></td>
<td>- Increased awareness about stress, its effect and management.</td>
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<tr>
<td>Yusoff (2011), Malaysia.</td>
<td>The Medical Student Wellbeing Workshop</td>
<td>- Reduced anxiety level.</td>
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<td></td>
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<td>- Reduced depressive symptoms.</td>
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<td></td>
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<td>- Reduction of distress symptoms.</td>
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<td></td>
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<td>- Sustainability of those effects</td>
<td></td>
</tr>
</tbody>
</table>

Outcomes of brief stress management intervention (required duration of less than 2 days)
## Outcomes of short-duration stress management intervention (required duration of 2 days to 4 weeks)

<table>
<thead>
<tr>
<th>Source and Country</th>
<th>Name of intervention</th>
<th>Outcome</th>
<th>Summary of outcome (n)</th>
</tr>
</thead>
</table>
| Kelly et al (1982), US. | Seminar | - Reduction of type A behaviour pre and post intervention.  
- Increased knowledge about stress, its effect and management.  
- Reduced stressful intensity perception of stressful events.  
- No measureable of anxiety state. | - Improved psychological health (3)  
- Increase awareness on stress, its effect and management (2)  
- Well accepted intervention (2)  
- Increased knowledge on stress, its effect and management (1)  
- Reduced stressful perception toward stressor (1)  
- Increased self-satisfaction (1)  
- Influenced career choice (1)  
- Enhanced positive state of mind (1)  
- Reduced negative positive state of mind (1)  
- Reduced ruminative and distractive though (1)  
- Increased positive wellbeing (1) |
- Positive perception towards the intervention.  
- Increase awareness on stress, its effects and management.  
- Reduction of anxiety and depression symptoms pre and post intervention. | |
| Klamon (1997), US. | The stress management workshop | - Well accepted course.  
- Increased interest to consider a career in psychiatry.  
- The intervention was very helpful in providing insight about stress and health. | |
| Jain et al (2007), US. | Mindfulness Meditation-Somatic Relaxation | - Reduced ruminative thought and behaviour.  
- Reduced distractive thought and behaviour.  
- Reduced psychological distress symptoms.  
- Enhanced positive state of mind.  
- Reduced negative psychological state | |
| Bughil et al (2009), US. | The Brief Behavioural Intervention Program (BPIP) | - Decreased anxiety level.  
- Increased positive wellbeing score.  
- No measureable effect on depression, self-control, vitality and general health.  
- Reduced prevalence of reported stress post intervention. | |
### Outcomes of medium-duration stress management intervention (required duration of more than 4 weeks and up to 8 weeks).

<table>
<thead>
<tr>
<th>Source and Country</th>
<th>Name of intervention</th>
<th>Outcome</th>
<th>Summary of outcome (n)</th>
</tr>
</thead>
</table>
| **Mitchell et al (1983), US.** | Support group | - No measureable effect on academic performance.  
- No measureable effect on anxiety or depression level.  
- No measureable effect of stress symptomatology.  
- No measureable effect on personality. | - Well accepted intervention (5)  
- Increased awareness on stress, its effect and management (3).  
- Reduced type A behaviour (1)  
- Improved psychological health (1).  
- Increased empathy (1)  
- Increased spirituality feeling (1) |
| **Holtzworth-Munroe et al (1985), US.** | Workshop | - Increased awareness about stress, its effect and management  
- Positive perception toward the intervention.  
- No measureable effect on anxiety, depression and self-esteem.  
- Reduced hard-driving scale score of type A behaviour.  
- Positive perception towards the intervention.  
- No measureable effects on academic performance, general health, personality, stress symptoms, depression, anxiety, stressful intensity perception of stressor, and loneliness. | |
| **Nathan et al (1987), US.** | The stress management training course | - Well accepted intervention evidence by high rate completion.  
- Reduced in depressive symptoms.  
- Reduced anxiety state.  
- Increased in empathy  
- Increased in spirituality feelings.  
- Reduced in psychological distress symptoms. | |
| **Shapiro et al (1998), US.** | The Mindfulness Based Stress Reduction | - Positive feedback and well accepted intervention.  
- Increased insight about the need for self-care.  
- Increased awareness about stress, its effect and management. | |
| **Lee & Graham (2001), US.** | The Help programme | - Well accepted as attendance rated more than 85%.  
- Useful and valuable intervention.  
- Increased stress management skills. | |
CONCLUSION

There are resources available and approachable for stress management interventions which require professional help and expertise.

Department of Psychiatry, World College of Medical Sciences and Research and Hospital provides:

- Outpatient services
- Inpatient ward facility
- Weekly OPD services at Civil Hospital, Jhajjar
- Psychiatric and Psychological Instruments for assessment and intervention
- Confidentiality
THANK YOU