**AGENDA**

* **Problem:**

Vestibular (Body-Balance related) issues faced by astronauts (Pre-flight, During-flight and Post-flight).

* **Supporting Points:**

1. Less Awareness about proper implementation of Vestibular laboratories.
2. Scope of Audiology and Vestibular Sciences, limited up to finding the hearing thresholds of the Astronauts.
3. Relatively limited success on the Rehabilitation processes of Vestibular issues faced by the Astronauts.
4. Pre-Flights Vestibular Diagnostics needs to be accelerated up.

* **Goal:**

1. To implement a sound Vestibular Diagnostics lab at every Space Centre.
2. To rule out the Vestibular problems with its major signs and symptoms:
3. Vertigo
4. Dizziness
5. Imbalance
6. Nausea
7. Vomiting
8. Disorientation
9. Eye-Hand Co-ordination issues
10. Sensory Conflict
11. To provide dynamic range of Rehabilitative and Compensatory strategies to the Astronauts for Pre/During/Post-Flight Missions.
12. To build up the devices for different kinds of vestibular problems.

Hence, this agenda ensures-

1. Crew safety
2. Comfort
3. High Mission Success Rate
4. Time Optimization
5. Cost Optimization

* **Steps:**

1. Vestibular Diagnostics-
2. Pre-Flight Proforma.
3. After-Flight Questionnaire (Filled by the Astronaut within 3-5 hours after returning from space).
4. Post-Flight Proforma
5. Space Motion Sickness Rating Scale (For Astronauts)- Perceptual

0 1 2 3 4 5 6 7

Where ‘0’ where ‘7’stands for most

being the severe form of Space Motion

negligent amount Sickness involving

of signs and symptoms Vertigo, Imbalance,Vomiting,

seen. Dizziness, Nausea, Disorientation,

Loss of Apetite.

1. Visual Representation with Optokinetic Response Methodology
2. Virtual Reality Chamber devised up with Rotatory Chair
3. Anti-Gravity cocoon Yoga
4. Caloric test: To check only Horizontal Canals.
5. ENG (Electro Nystamography).
6. Parallel swing (otolithic False Stimulation).
7. Torsion Chair.
8. Speech perception Tests in Space.