



Value Added Course Certification Electronic Gadgets - Impact on Physical and Mental Health

Department of Physiology, Velammal Medical College Hospital and Research Institute, Madurai, Tamil Nadu had organized a certifiable Value-Added Course to First Professional M.B.B.S. students (2024-25 batch) on 10th and 17th November, 2024.

Topic Name: Electronic Gadgets - Impact on Physical and Mental Health

Introduction: Electronic gadgets, such as smartphones, tablets, and computers, play a significant role in daily life but pose notable risks to physical and mental health. Excessive use can lead to issues like eye strain, headaches, poor posture, sleep disturbances, and even mental health problems like anxiety and depression. For medical undergraduates, understanding these effects is essential. They'll encounter patients suffering from conditions linked to prolonged gadget use, and having knowledge about these risks allows them to provide effective, evidence-based advice. Additionally, by learning about these impacts, medical students can adopt healthier tech habits themselves, fostering better well-being in their demanding careers.

Objective: To educate the medical students about electronic gadgets and their impact on physical and mental health.

Date: 10th and 17th November, 2024

Course Duration: 16 hours of duration (2 days)

Location: Department of Physiology, Velammal Medical College Hospital and Research Institute, Madurai by Online Zoom Video Sessions.

Organized by: Department of Physiology

Audience: First year M.B.B.S. students

Speaker: Faculty from Departments of Physiology, Microbiology, ENT, Community medicine, Pediatrics, Orthopedics, Thoracic medicine.

Method adopted: Online Zoom video meeting sessions.

Materials used: Lecture hand-outs



Course Schedule

10.11.2024 – Sunday	08.00 am - 08.05 am	Welcome address	Dr.S.Anu, Professor and Head, Dept. of Physiology
	08.05 am - 08.15 am	Pre-test	Dr.R.Durai Arasan, Assistant Professor, Dept. of Physiology
	08.15 am - 09.30 am	The Gadget Generation: Navigating the Health Impacts of Tech on Paediatric Health	Dr.T.Karthik Raj, Associate Professor, Dept. of Pediatrics
	09.30 am - 10.40 am	Gadget Use and Reproductive Health: What You Need to Know	Dr.V.Sriandaal, Associate Professor, Dept.of Community Medicine
	10.40 am - 11.50 am	Breathless by Screen Time? Exploring Gadgets' Impact on Respiratory Health	Dr.R.Anand, Assistant Professor, Dept. of Respiratory Medicine
	11.50 am - 01.00 pm	The Posture Problem: Are Your Devices Bending You Out of Shape?	Dr.V.Janarthanan, Assistant Professor, Dept. of Orthopedics
	02.00 pm - 03.15 pm	From Clicks to Calories: The Hidden Weight of Gadget Addiction	Dr.B.T.Sudhir Ben Nelson, Professor, Dept. of Community Medicine
	03.15 pm - 04.30 pm	From Blue Light to Breakouts: The Skin Side of Screen Time	Dr.R.Durai Arasan, Assistant Professor, Dept. of Physiology
	04.30 pm - 05.00 pm	Summary of the day's sessions and post-test	Dr.Noel Naveen Johnson, Senior Resident, Dept. of Physiology



17.11.2024 – Sunday	08.00 am - 08.10 am	Pre-test	Dr.R.Durai Arasan, Assistant Professor, Dept. of Physiology
	08.10 am - 09.30 am	Screen Dreams: How Electronic Gadgets Are Shaping Our Sleep and Health	Dr.John Rajpathy, Professor, Dept. of Physiology
	09.30 am - 11.00 am	Sound of Silence: The Toll of Gadget Noise on Hearing Health	Dr.P.Rajasekaran, Professor and Head, Dept. of ENT
	11.00 am - 01.00 pm	Mind Over Tech: How Gadgets Are Shaping Our Mental Health	Dr.S.B.Rena Rosalind, Professor and Head, Dept. of Psychiatry
	02.00 pm - 03.15 pm	Germly Gadgets: The Hidden Infection Risks of Your Favourite Devices	Dr.T.Rajendran, Professor and Head, Dept. of Microbiology
	03.15 pm - 04.30 pm	Digital Eyestrain: How Gadgets Are Taking a Toll on Our Vision	Dr.M.Renu Meena, Assistant Professor, Dept. of Physiology
	04.30 pm - 04.50 pm	Summary and post-test	Dr.J.T.Ajit Kumar, Assistant Professor, Dept. of Physiology
	04.50 pm - 05.00 pm	Vote of thanks	Dr.R.Durai Arasan, Assistant Professor, Dept. of Physiology

Description: The course was conducted over a period of two days in several sessions. The faculty from departments of Physiology, Microbiology, ENT, Community medicine, Pediatrics, Orthopedics, Thoracic medicine were involved. The topics covered were pertaining to electronic gadgets and their impact on physical and mental health. Each session was conducted by a faculty with the help of Zoom online sessions.



Outcome:

Roll no	Team members	Research Topics
6 - 10	Agash NA, Akash Kumar V, Akila P, Amala Agnan Biju G, Anish Kumar VK	Effect of Environment on studies
26 - 30	Dhaneeshta T, DhanuShree, Dhanush, Dharani, Dharshana	Immediate effect of watching mobile phone on cognitive function (Memory) among medical students
36 - 40	Giridhar AL, Giri Raj M, Giri Raja KM, Hajaana Banu, Harani S	Effect of electronic gadgets on menstrual cramps among early adults (18 – 22 Years of age)
61 – 65	Keerthi Yazhini Ragu, Keerthika, Kishor Kumar, Krishanth, Krittika	Effect of prolonged use of earbuds on hearing threshold
76 – 80	Nandha Kumar, Narselvi Gayathri, Naviya, Nidharshan, Nikil Srinivasan	Effect of prolonged usage of airpods usage on cognitive function



Department of Physiology, Velammal Medical College Hospital & Research Institute, Madurai



EMR and Oxidative Stress (Males)

- EMR increases reactive oxygen species (ROS).
- ROS cause oxidative damage to sperm.
- Impact on sperm motility and DNA integrity.
- Agarwal et al. (2009): EMR from mobile phones reduced sperm motility by 30%.
- Increased ROS by 27% after prolonged exposure.

Oxidative damage

Kavivarshini S

LESS IS MORE

10 minutes/ hour =
4 hours in a day =
28 hours in a week

Shanmugam Su...

ELECTRONIC GADGETS and HEALTH HAZARDS

Dr.T.Rajendran MD
Prof. and HOD
Microbiology

PRASANNA DE...

CLICKS TO CALORIES

Lakshmya