

高雄醫學大學附設中和紀念醫院 Kaohsiung Medical University Chung-Ho Memorial Hospital

You Can "Chair"ish It: KMUH Pediatric Team Pioneers AI Classroom for Precise ADHD Diagnosis

Attention Deficit Hyperactivity Disorder (ADHD), a common neurobehavioral condition affecting about 6-7% of children, has traditionally relied on clinical observations for diagnosis and severity assessment. Tools like the SNAP-IV scale can be influenced by subjective judgments from observers such as parents or teachers, impacting diagnostic accuracy. The pediatric team at Kaohsiung Medical University Chung-Ho Memorial Hospital (KMUH) has developed an innovative solution: an AI-powered situational classroom that simulates a real classroom environment.

Using non-invasive, long-term monitoring methods, this classroom leverages the inattentive and hyperactive behaviors of ADHD children to provide automated, objective diagnoses and assessments. Equipped with load sensors in chairs to detect patient movements, this patented "ADHD Assessment Tool" reduces the burden on parents and healthcare providers while benefiting countless ADHD patients. The technology has been adopted by major hospitals across Taiwan, with even remote island hospitals seeking to learn from KMUH's expertise.



KMUH's pediatric team, led by (from left) Medical Informatics Department Director Chung-cheng Tsai, Pediatric Department Head Jong-Hau Hsu, Vice Superintendent Henry Horng-Shing Lu, Vice Superintendent Chia-Yen Dai, Pediatric Department Director Lung-Chang Lin, and Professor Rei-Cheng Yang, is revolutionizing ADHD diagnosis with this groundbreaking AI classroom.