

UMP'S INNOVATIVE WAYS TO HELP STROKE-STRICKEN PATIENTS



A team of Universiti Malaysia Pahang (UMP) researchers had come up with a technology-related research that produced a rehabilitation device designed for stroke-stricken patients undergoing physiotherapy.

Faculty of Mechanical Engineering (FKM) lecturer, Zulkifli Ahmad said the research, assisted by Idris Mat Sahat and Saiful Anwar Che Ghani of the same faculty, came about after meetings with International Islamic University Malaysia (IIUM) rehabilitation specialists who related their experience working with such patients.

“The research made is about rehabilitation aids for patients who suffered physical complications and paralysed due to stroke and problems will normally arise during the physiotherapy session.

“The device made will ascertain the patient’s condition and whether the patient has made full recovery or not. It is done by observing the body balance,” he said.

He added that the study was completed in March last

year and that they had received cooperation from IIUM’s Department of Allied Health in Kuantan, courtesy of its rehabilitation unit head Narimah Daud.

He said the current practise to check on the progress of a patient was observed by the trained naked eye of the physiotherapy only.

“As such, my team started to work on a device that will detect the patient’s body balance.

“It involves fitting a pressure sensor that is placed under the insole. It will detect the weight mounted on it. The weight reading is taken with the patient in the standing position,” he added.

Zulkifli said a physiotherapist would instruct a patient to do a ‘sit to stand’ test, adding, the patient would first sit before standing up.

He added that before the patient stood up, both feet should be positioned exactly on the insole device and once they were up on their feet, the device would detect the pressure