

# **VIRTUAL REALITY PARAPODIUM (VRP) UNTUK MENDUKUNG PERCEPATAN REHABILITASI PASIEN STROKE**

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## **ABSTRACT**

The rehabilitation process for post-stroke patients has crucial problems that cannot be ruled out. This problem is the mental psychology of post-stroke sufferers where the patient's peace of mind is the main key to speedy recovery. Therefore, Dikti personnel together with partners provide alternative solutions in the form of a Virtual Reality Parapodium. A mechanic that has dynamic mobile-flexible capabilities that are easy to use in rehabilitation of the lower part of the human body such as practicing walking and so on. The idea for this solution was successfully funded by the Matching Fund Batch 2 program. In the development and implementation process, collaboration between Dikti personnel and partners carried out various activities. Activities that have been carried out include FGDs 1 to 4. These FGDs explore needs and system analysis down to technical realization with input from various experts in their fields. These experts include neurologists, paraplegia therapists to professional developers who make virtual reality technology. In addition, the team also succeeded in building a parapodium mechanic with dimensions for adult users. The team also managed to build software in the form of virtual reality with two free and task modes. The virtual reality environment that is presented is a forest, beach and cave. After trying these views, it is able to relax the user which is suitable for someone's rehabilitation phase. Publications have also resulted from the developments that have been carried out, namely in the form of patents that have been successfully registered and participation in the international scientific conference ICERI.

Kata Kunci: *Parapodium, Stroke, Rehabilitation, Virtual Reality*