

Innovation on Manual Wheelchair for Hemiplegic and Tetraplegic Patients

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ABSTRACT

While almost 90% of wheelchair users are using manual pushrim wheelchair for their mobility due to the cost and less maintenance. But for individuals with hemiplegic and tetraplegic, they are facing difficulty to propel it around. To overcome this problem, many researchers used current technology to develop mechanisms by adding extra features on manual pushrim wheelchair. Mechanism that can reduce propelling forces, number of hands needed to propel and as a rehabilitation tool to speed up their recovery process. Positive result obtained from innovated wheelchair in providing assistance as discussed further below. More researchers need to focus more in this area to help disabilities live their life as a normal person

KEYWORDS: Hemiplegic; Tetraplegic; Instrumented wheelchair; Power-assist wheel;
Rehabilitation wheelchair

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