

ABSTRACT

The lower limbs are a part that is frequently injured as much as 60% of the rest of the body, and according to the Basic Health Research survey (2018) 67.9% of 92,976 people who experienced injuries in Indonesia were injuries to the lower limbs, such as the thighs, calves, soles, and toes, Foot rehabilitation functions to restore feet that have been injured by an object that causes movement of the foot to experience disability. Knee Ankle Foot Orthosis (KAFO) is a movement aid that corrects the lower limbs in humans from the soles of the feet to the knees. and can stabilize the leg muscles, several patient complaints regarding the KAFO in the KAFO locking system which is less effective and takes a lot of time, the ankle belt part which is not locked enough and the effectiveness in caring for the KAFO belt which is difficult and easily damp, this research uses a qualitative method approach by means of interviews from Rehabilitation Specialist Doctor experts, design design using the SCAMPER method by redesigning the KAFO using a minimalist style and maximizing existing systems in existing products and other system features to optimize the ergonomic design of the KAFO for comfort so that patient rehabilitation can run optimally throughout the duration.

Keywords: *Redesign, KAFO, Rehabilitation, feet, Patients.*