ABSTRACT

A Low Back Pain (LBP) is a common health issue experienced by motorcycle taxi drivers due to long working hours, poor ergonomic seating positions, and uneven distribution of luggage weight. This problem can impact their productivity and quality of life. This research aims to design and develop an innovation in the form of a heat vest that provides thermal therapy to reduce LBP complaints among motorcycle taxi drivers, especially in Bojongsoang, Bandung Regency.The research method uses a qualitative approach with a User-Centered Design (UCD) method, focusing on user needs and comfort. Data collection techniques include in-depth interviews, direct observation, documentation, and focus group discussions (FGD). This study also considers ergonomic principles in product design to ensure the Vest provides maximum comfort and effectiveness in relieving lower back pain.The results of this research are expected to produce a lightweight, comfortable, and effective heat vest that can deliver heat to reduce muscle tension and improve blood circulation. Additionally, this research aims to raise awareness among motorcycle taxi drivers about the importance of good posture and the use of ergonomic aids. This innovation is expected to contribute to improving the quality of life and productivity of motorcycle taxi drivers and serve as a reference for the development of similar products in the ergonomics and health industries.

Keywords*: Transportation, Online Motorcycle Taxis, Low Back Pain.*