

3K\VLFD O GLVDEL OLW\ UDQJH RI PRWLRQ DQG VHOHFWHG JD osteoarthritis

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Osteoarthritis is the most common joint disorder worldwide. In Nigeria, the most affected joint is the knee. There is paucity of literature on the interrelationships among physical disability, range of motion and selected gait of knee OA patients in Nigeria. This study is therefore to investigate the relationships between physical disability and knee flexion and each of stride length, dynamic base of support, walking speed and stride time in patients with knee OA. The participants were purposively sampled and recruited as they became available. The degree of physical disability was measured using Ibadan knee/hip osteoarthritis outcome measure questionnaire (IKHOAM), with higher IKHOAM scores implying lesser physical disability. Active knee flexion was measured using goniometer. Footprints of participants were recorded in a 10 m paper walkway. Kinematic gait parameters were computed using the footprints within the central 6 m of the 10 m walkway. Pearson's product moment correlation was used to determine the correlation between the IKHOAM scores and degree, each of knee flexion, between the IKHOAM scores and each of kinematic gait parameters and between range of knee flexion and each of the kinematic gait parameters. The level of significance was set at 0.05 alpha. Results showed significant correlations between physical disability and each of knee flexion ($P=0.016$, $r=-0.336$), stride time ($P=0.023$, $r=+0.347$), stride length ($P=0.000$, $r=-0.652$), walking speed ($P=0.000$, $r=-0.586$). And between knee flexion and each of walking speed ($p=0.009$, $r=0.396$) and stride time ($p=0.029$, $r=-0.333$). It was concluded that walking speed and stride time were the only kinematic parameters that correlated with each of knee flexion and physical disability.

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