

Improving Exercise Adherence Through Online Journaling Following Physical Therapy Treatment for Chronic Low Back Pain

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Low back pain (LBP) affects about 80% of all people at some point in their life, and with a high recurrence rate, often becomes chronic, limiting people's function. We examined if online journaling for 6 months with a prescribed physical therapy (PT) home exercise program (HEP) increased exercise adherence (EA) and thus led to decreased pain and improved function for subjects (age 18-55 years) with chronic LBP.

Subjects completed the Numeric Pain Rating Scale (NPRS) and the Oswestry Disability Index (ODI) at pre-treatment and 6 months post-treatment initiation. Following 6 weekly PT treatments, one group (Web group [WG]; n=20) started a HEP and online journal to record pain levels and exercises completed each day. The journals were monitored weekly. The control group (NoWeb [NW]; n= 20) was discharged from PT with a HEP to continue on their own. Six months post-treatment initiation, low back pain levels (NPRS) and function (ODI) were compared between the two groups using an ANOVA with a significance level set to $P=0.05$. EA rates were also compared at six months.

At six months, both groups improved significantly in their NPRS and ODI scores, ($P < .0001$ for each) but with no group differences for either outcome ($P = 0.37$, $P = 0.73$, respectively). However, WG subjects completed specific exercises on average 68% (+/- 41%) of the time, while most NoWeb participants reported doing specific exercises "some" (25-50%) of the time or less. NoWeb participants also reported doing activities of daily living at an average level of 2.6 out of 4 (0=None; 4=Usually). WG participants demonstrated an adherence rate at 3.55 out of 4. Although there were no differences in pain or disability scores at 6 months, a difference between groups was shown in EA rates, suggesting that online journaling is a beneficial method for increasing EA.