Physical Activity Monitoring Preferences in Adults with Bipolar Disorder

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This report investigated physical activity (PA) monitoring preferences and problems in adults with bipolar disorder.

Methods: PARC2 study was conducted at the Western Psychiatric Institute and Clinic at the University of Pittsburgh. This secondary data analysis assessed three PA monitors; Body Media SW Pro Armband, Actigraph AM-7164, and Pedometer Omron HJ-720IT. PA monitors were worn simultaneously for one week. Participants reported preferences and problems (irritating, cumbersome, movement of the activity monitor, technical difficulties, and impaired functioning) encountered with each activity monitor.

Results: Approximately 70% of the participants (n=66) were middle-aged Caucasian women with a diagnosis of BD I and overweight. Sixty-six adults with BD wore all 3 monitors simultaneously. Twelve (18%) participants had no PA monitoring preference, 28 (42%) preferred the armband, 17 (26%) preferred the pedometer and 9 (14%) preferred the Actigraph. Activity monitoring preferences did not statistically differ by age, gender, race, BMI, diagnosis, or depressive and mania symptoms ($p>0.25$). Two-thirds of the participants (64%) had at least one problem with at least one activity monitor. As far as problem categories, more than a quarter of participants reported irritation with the Armband [26%, n=17] and movement of the pedometer [32%, n =21]. No statistically significant association was observed between activity monitoring preferences and problems ($p=0.72$).

Conclusion: Adults with bipolar disorder were willing to wear activity monitors even though problems were reported. Preference of physical activity monitors, in descending order, was the armband, pedometer, and Actigraph. One fifth of the adults with bipolar disorder reported no preferences in activity monitors. The activity monitors selected for investigation included the “gold standard” in activity monitoring (Actigraph) worn at the waist as well as a research grade pedometer that is considerably more affordable, provides activity feedback in real-time, and may be a more feasible option for large scale studies.