

1. Statistical Analysis Plan

Reducing Disparities in the Treatment of Hypertension Using the OWL mHealth Tool

2. NCT Number

NCT03974334

3. Submitted

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Data Analysis

Descriptive statistics were used to analyze survey information. Means and standard deviations (SD) as well as frequencies and percentages were calculated for demographic characteristics. Based on sample size and group characteristics, Race was categorized into Black/African American, White/Caucasian, or Other. Education level was categorized into high school/Generalized Education Development (GED) or less, some college or associates/no degree, and college graduate/postgraduate. Employment status was categorized into working full-time/part-time, unemployed/retired, and sick leave/disability. Income was split at \$30,000, with participants making either above or below that line. Country of Birth (United States or Country Outside of the US), Marriage (Married or Not Married), and Health Insurance (Private or Public) were all similarly collapsed. The answer responses “Often True” and “Sometimes True” for food insecurity questions were also collapsed together.

To compare the results between baseline and follow-up, we used paired sample *t*-tests and descriptive statistics. We carried missing values forward from the pre-test to account for missed survey items. Means and SDs were calculated for the BPKQ, HTN-SCP-SE, and blood pressure self-monitoring items at baseline and 8 weeks. All quantitative analyses were conducted using SPSS 26.0.0.0 (IBM SPSS Statistics Version 26, IBM Corp.).

In terms of OWL usage data, we tracked and summed the average and total number of accessed mind-body practices (e.g., body scans, yoga sessions, and meditations), the number of times participants used the journal, and the total amount of time spent on OWL-H.

Qualitative data analysis methods were used to identify themes that were related to participants’ OWL-H platform utilization. The media comments and journal entries were reviewed and independently coded by two research assistants (AWC and LK). Using modified

grounded theory, coders inductively generated new codes. After the media comments and journal entries were coded, the two RAs reconciled the codes with the RC and resolved any differences by consensus and review. Coders identified high density codes and combined similar codes into categories and themes, which were shared with the research team. Additionally, this study was reviewed by the UMMS Institutional Review Board (H00015619).