

# Demographic and Outcome Trends in a Naturopathic Teaching Clinic

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### Abstract

Naturopathic Doctors (NDs) are trained to treat patients using an individualized approach combining dietary and lifestyle changes, botanical and nutritional medicines, homeopathic medicines, and counseling techniques. In order to effectively study naturopathic medicine, it is beneficial to use whole systems research rather than standardized protocols [1]. In our study, we monitored 27 patients treated individually with wholistic naturopathic medicine for various chief concerns over the course of 12 weeks in the UB Naturopathic Clinic. These patients were given surveys at baseline, 6 weeks, and 12 weeks pertaining to their health-related quality of life (HRQoL), which is considered by the CDC to be an effective tool for predicting mortality and morbidity compared to many objective measures [2]. We used the PROMIS Global Health Scale questionnaire, a validated tool for monitoring HRQoL, for these measures. We also collected demographic data at baseline, including gender, chief medical concerns, age, ethnicity, income level, and education. In our study population, 38.5% of patients were seeking care for depression/anxiety and 15.4% of patients were seeking care for fatigue. 46.2% of participants are aged 50-69 years old, and 71.8% are female. 28.2% have an income under \$29,999 per year, and 51.3% are Caucasian. PROMIS Global Health Measures are divided into Physical Health and Mental Health T-scores, and a Tscore of 50 is considered an average score for a control population sampled by PROMIS. GPH scores started at 44.652 and increased to 47.8 at 6 weeks and declined to 45.324 at 12 weeks (average SD +/- 7.94). GMH scores started at 45.5259 at baseline, increased to 46.5185 at 6 weeks, and increased to 47.356 at 12 weeks (average SD +/- 8.40). While not statistically significant, our research helps us to understand the type of patients who visit a naturopathic clinic and to perform future research to target treatments for this particular population. A trend towards improved GMH scores was noted over 12 weeks.

#### **Methods**

- All new adult patients to the UB Naturopathic Clinic were invited to participate
- 27 participants completed all three PROMIS Global Health Surveys
- PROMIS Global Health Surveys were given at baseline, 6 weeks, and 12 weeks
- Demographics data was collected at baseline only
- Baseline data was collected with paper tools
- 6 and 12 week data was collected with UB's LimeSurvey electronic survey tool
- Demographic data and Global Health Scores were analyzed using SPSS
- PROMIS HealthScore Assessment tool was used to calculate T-scores for GMH and GPH
- ANOVA was used to attempt to correlate demographic data with GPH and GMH scores

# Physical Health 44.052 A7.8 45.324 BASELINE 6 WEEKS Time

#### Introduction

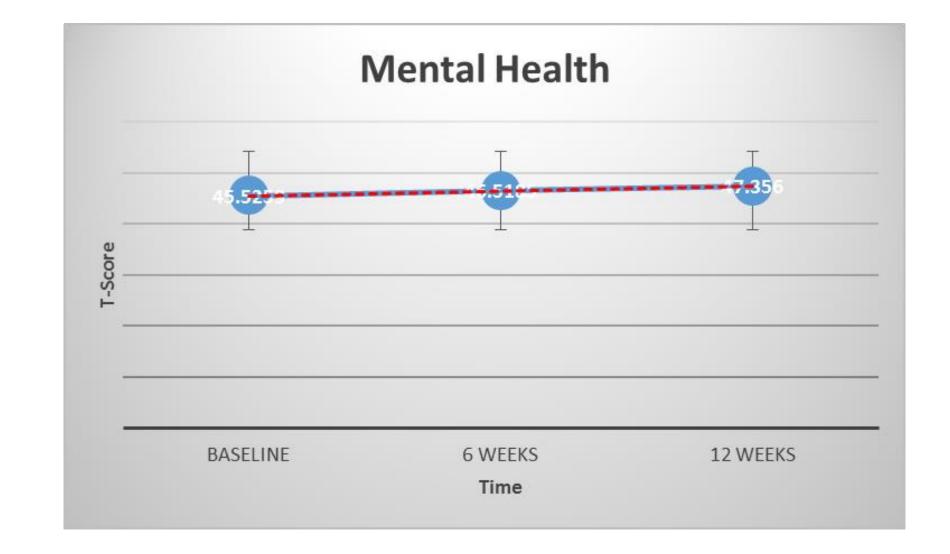
- NDs use an individual approach to patient care via a combination of lifestyle interventions, botanical medicines, nutraceuticals, physical medicine modalities, and more. No two patients are treated the same.
- This **whole medicine approach** is being used more and more by researchers in many healthcare fields, rather than giving each patient the same standardized protocol.
- According to the CDC, **patient-reported health related quality of life (HRQoL)** measures are more effective at predicting mortality and morbidity than many objective measures of health [2].
- Our study specifically looked at changes in HRQoL in patients undergoing **individualized naturopathic care** at the UB Naturopathic Clinic for 12 weeks

#### **Results**

- 38.5% of respondents were seeking care for depression/anxiety
- 15.4% of respondents were seeking care for fatigue
- 46.2% of respondents are aged 50-69 years old
- 71.8% of respondents are female
- 28.2% have an income under \$29,999 per year
- 51.3% are Caucasian
- PROMIS Global Health Measures are divided into Physical Health and Mental Health T-scores, and a T-score of 50 is considered an average score for a control population sampled by PROMIS.
- GPH scores started at 44.652 and increased to 47.8 at 6 weeks and declined to 45.324 at 12 weeks (average SD +/- 7.94).
- GMH scores started at 45.525 at baseline, increased to 46.516 at 6 weeks, and increased to 47.356 at 12 weeks (average SD +/- 8.40).
- While not statistically significant, our research helps us to understand the type of patients who visit a naturopathic clinic and to perform future research to target treatments for this particular population. A trend towards improved GMH scores was noted over 12 weeks.

highest for mental health improvements, though not statistically significant.

- The 35-49 year age group showed the most improvement in mental health responses, though not statistically significant
- Participants with either a high school diploma or master degree scored the



## Discussion and Conclusions

- Depression, anxiety, and fatigue may be leading reasons that patients seek naturopathic care at UB Clinic
- These patients tend to be middle aged females with an annual household income under \$29,999
- Overall trends show a slight improvement in mental health over 12 weeks of individualized naturopathic care
- In order to improve power and significance, future studies will aim to investigate the role of naturopathic care in patients with depression, anxiety, and fatigue
- Naturopathic students and faculty may want to focus on improving protocols for these chief concerns specifically for low income patients
- Future studies should extend care for longer than 12 weeks and more closely monitor compliance with naturopathic protocols over this time

#### References

- [1] Verhoef M, Vanderheyden L. Combining qualitative methods and RCTs in CAM intervention research. In: Adams J, editor., ed. Researching Complementary and Alternative Medicine. Abingdon, U.K.: Routledge; 2007: 72–86
- [2] Dominick KL, Ahern FM, Gold CH, Heller DA. Relationship of health-related quality of life to health care utilization and mortality among older adults. *Aging Clin Exp Res* 2002;14(6):499–508