

NR716 Discussion Week 5: Analyzing Descriptive Statistics

Calculations

- The percentage of subjects whose diabetes condition is uncontrolled and HgA1c >7 was 90% pre-intervention.
- The number of subjects with uncontrolled diabetes post-intervention was 50%.
- The mean or average pre HgA1c pre-intervention was 7.96, and the middle post-intervention was 7.5.
- Median HgA1c levels pre-intervention were calculated by the exact center of all scores and were 7.65. Median HgA1C levels post-intervention were 7.0
- The preintervention standard deviation of HbA1c levels was 1.4, and post-intervention also 1.4.
- The preintervention range of HbA1c levels is 5, and the postintervention content is 4.9.

Conclusions

These descriptive statistics show that the average HbA1c levels for the patients were slightly affected by the intervention, as the values experienced a 0.46 drop from 7.96 to 7.50 after the intervention was implemented. However, patient 10 has high values of pre and post-implementation HbA1c and is an outlier possible due to data entry errors, experimental measurement errors, or natural variation, and has skewed the mean (Hubert & Van der Veen, 2008). Since there are no statistically significant differences in the standard deviations or ranges from the data analysis, it can be concluded that the intervention protocol had no impact on the patients' HbA1c levels. While all the patients experienced reductions in their HbA1c values, the reduction is too small to be inferred for a larger population. I feel that the outcomes of this practice change project are not significant enough. Factors that affected the validity and reliability of this intervention study are the effect of patient 10 outliers and the small sample size.

Recommendations

Diabetes self-management education (DSME) provides the foundation to help people with diabetes to navigate lifestyle decisions and activities proven by research to help in improving health outcomes. Diabetes self-management education (DSME) is the process of promoting the knowledge, skill, and ability necessary for patients to undertake ongoing diabetes self-care