Abstract

The objective of this study was to assess the efficacy of asthma action plan (AAP) in reducing emergency (ER)/urgent care (UC) visits, and unscheduled office visits among children aged 1-4 years with mild or moderate asthma. A retrospective chart review was conducted and a comparison was made between children who received the AAP and those who did not, based on the number of ER/UC visits and unscheduled asthma office visits. A G* Power 3.1.4 analysis was conducted to determine sample size. At a 95% confidence level, a confidence interval of .05 (5%) sample size was estimated at 79 patients; additional participants were recruited to account for potential outlier data. The total number of participants (N = 88) selected based on the inclusion criteria were 33 (37.5%) females and 55 (62.5%) males. Of this, 14.8% of the participants were 1 year of age, 30.7% were 2 years of age, 33% were 3 years of age, and 21.6% were 4 years of age. There were more Hispanics (55.7%) than other ethnicities consistent with the demographics of the clinical site. No significant effect of AAP on the frequency of ER/UC visits and unscheduled visits was found (Lambda (2, 85) = .983, p > .05) for asthma exacerbation, using a one-way MANOVA. Additionally, no significant effect was found (Lambda (4, 168) = .973, p > .05) between the health care provider AAP reviews/modifications and ER/UC and unscheduled office visits.

Keywords: asthma action plan, asthma, asthma symptoms, asthma step-wise approach, peak flow meter