Video-based teach-to-goal intervention on inhaler technique on adults with asthma and COPD: a randomized controlled trial

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ABSTRACT

The incorrect use of inhalers is highly associated with poor patient outcomes. This randomized controlled trial investigated the impact of a novel video-based teach-to-goal (TTG) intervention on the following outcomes; mastery of inhaler technique, disease control, medication adherence, and disease-related QoL over time among patients with asthma and COPD.

After baseline assessment, participants received either a verbal (control group) or a video-based (intervention group) TTG strategy and were assessed after three months for the impact of the intervention on the intended outcomes. At baseline, intervention (n=51) and control (n=52) groups had comparable characteristics. At follow-up, inhaler technique and medication adherence improved among the intervention group compared to control group ((93.4% vs 67%) and (88.2% to 61.5%), respectively (p<0.05)) as well as to baseline ((93.4% to 49.5%) and (88.2% to 66.7%), respectively (p<0.05)). Similarly, disease control was also ameliorated among the intervention group compared to baseline (35.3% to 54.9%) (p<0.05).

Interventions using video-based TTG education are effective in enhancing and retaining the inhaler technique over time, with a positive impact on disease outcomes among patients with asthma and COPD.

Keywords: Asthma, Chronic Obstructive Pulmonary Disease, Patient Education, Teach-To-Goal Education, Video-Based, Randomized Controlled Trial.