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Evaluation of the Effectiveness of Counselling for the Correct Inhaler Techniques among Asthmatic Patients

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Introduction and Objectives:

Incidence of asthma has been increased recently in Sri Lanka. Poor inhaler techniques by patients may reduce the effectiveness of pharmacological management. This study aimed to evaluate the effectiveness of counseling for correct inhaler techniques among asthmatic patients.

Methods:

A prospective study among patients with the history of asthma was carried out at Teaching Hospital Peradeniya. A pretested questionnaire was used to assess patients' knowledge of inhaler techniques in both control and intervention groups. The intervention group received a counseling session using video demonstrations and leaflets on proper inhaler techniques in addition to routine service that they get from the clinic. Both groups were assessed at one month follow up.

Results and Conclusions:

160 patients were recruited (79 control and 81 intervention). In the control group, 22 used MDI without spacers, 21 MDI with spacers, 18 Rotahalers, 6 Aerolizers, and 13 Ventohalers while in the intervention group consist of 23 MDI without spacers, 18 MDI with spacers, 23 Rotahalers, 3 Aerolizers and 15 Ventohalers at baseline. Four control patients and 9 intervention patients were excluded at one month due to change in the device or lost to follow up. Overall demonstration of optimal inhaler techniques were significantly higher after one month compared to baseline in the intervention group for all the inhalers; MDI without spacers (X2=28.94, p<0.0001), MDI with spacers for two techniques (X2=5.15, p=0.0233; X2=7.626, p=0.0058 respectively), Rotahalers (X2=11.80, p=0.0006), and Ventohalers (X2=10.07, p=0.0015) except for Aerolizers (X2=2.86, p=0.0910). Brief educational intervention improved correct inhaler techniques significantly at one month follow up.

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