

## EVALUATION OF KNOWLEDGE AND COUNSELING ON METERED-DOSE INHALERS AND NEBULISERS AMONG COMMUNITY PHARMACISTS IN IBADAN - AN INTERVENTION STUDY

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### ABSTRACT

*This study evaluated the impact of an educational intervention on knowledge and counseling on metered-dose inhalers (MDIs) and nebulisers among community pharmacists in Ibadan, Nigeria. A validated semi-structured questionnaire was utilised for data collection on study participants' baseline knowledge and counseling on the selected asthma medication devices. The community pharmacists were randomised into control and intervention groups. An online educational intervention was carried out among pharmacists in the intervention group. The intervention comprised updates on basic information vis-à-vis knowledge and patient counseling on MDIs and nebulisers. A post-intervention assessment was carried out a month later to evaluate the impact of the intervention. Data was summarised using descriptive and inferential statistics, with level of significance set as  $p < 0.05$ . Response rate was 77.2% (112/145). Study findings showed significant improvement on knowledge and counseling among the community pharmacists in the intervention group, postintervention. Pharmacists' knowledge of MDIs and nebulisers (control versus intervention) was comparable at baseline ( $5.83 \pm 2.46$  versus  $6.34 \pm 2.16$ ) but significantly different postintervention ( $5.87 \pm 2.34$  versus  $7.10 \pm 2.21$ ). Similarly, pharmacists' counselling on asthma medication devices was comparable at baseline ( $3.59 \pm 2.54$  versus  $3.63 \pm 1.83$ ) but significantly different post-intervention ( $3.35 \pm 3.13$  versus  $7.93 \pm 2.58$ ). Work experience as community pharmacists did not influence participants' knowledge and counseling on MDIs and nebulisers. The educational intervention significantly improved knowledge and counseling on MDIs and nebulisers among community pharmacists in Ibadan, Nigeria. There is need for regular educational updates to improve the quality of care offered by community pharmacists.*

**Keywords:** Intervention, Pharmacist, Metered-dose inhaler, Knowledge, Counseling

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