Interactive Technology: Enhance the Level of Patient Education on Correct Inhaler Techniques

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Introduction: Inhalation therapy is often used to treat COPD. Due to advanced technology, various forms of sophisticated inhalers & spacer devices are available for the convenience of patients. An inhaler is not a simple tool; proper use requires technical skills which ensure inhalation of a suitable volume of drug, optimal rhythm of inhalation, proper device management, coordination and pre and post preparation. The objective of an ideal & easy-to use inhaler is far from reality. Targeted patient education is a critical factor in the use & misuse of inhalers.

Tools for Patient Education: Commonly used tools for education on inhaler technique include verbal, written and/or video instructions and/or a demonstration by healthcare provider (who may not have received proper training). In many cases, patients are expected to learn on their own. However, published studies suggest that as many as 25% of patients with asthma or COPD have never received verbal inhaler technique instruction. When given, instruction is often rushed, poor quality and not reinforced. Only an estimated 11% of patients receive follow-up assessment and education on their inhaler technique. The risk of misusing inhalers is particularly high in older and more debilitated COPD patients.

Barriers in Patient Education: Language, difficult written instructions, no instructions due to lack of time, limited learning resources, patients with multiple inhalers & lack of retention, older patients take time to learn.

Description: We believe that using an interactive on-line audio-visual self-learning customized for individual patient’s needs and capabilities can prove to be more effective educational tool.

- Education provided in regional language with interactive components like animations can help patients learn with better retention of the information.
- An online instructor coaching step by step correct breathing techniques can help patients to breathe right and reduce common errors in inhalation with effective drug intake into their lungs.
- Tool that provides real time practice features for patients, each time they use their inhaler device, they can get step by step visual feedback, that can be shared with their Physicians for review and corrections. Timely corrections can improve treatment outcome.
- Providing do’s and don’ts that highlight common mistakes made for each inhaler technique with visual interpretation of each step, as to what happens when an inhaler is taken incorrectly and useful tips with analogues to remember can prevent the critical errors and reduce the drug wastage.
Single trusted site with comprehensive training on inhaler devices for patients and where healthcare professionals can earn CME credits can be more effective.

**Conclusion:** Retention of correct inhaler technique is as important as its acquisition. A new approach of teaching can improve patient participation; encourage reinforced training and provide better retention. We believe that technologic advancements and mobile devices can be leveraged to deliver quality patient education on proper inhaler techniques.

**References:**

