

Correspondence

Community pharmacists as medication educators

To the Editor:

We read with interest the paper by Cain et al¹ about the ability of the community pharmacist to learn the proper actuation techniques of inhaler devices. We agree with the observations of the authors that the pharmacist can be an important resource for patients using these devices and that knowledge about available inhalation systems is essential. In fact, in 1995 the National Heart, Lung, and Blood Institute published "The Role of the Pharmacist in Improving Asthma Care," which emphasizes inhalation device instruction as a key component.

The absence of detail in the Cain paper, however, limits the interpretation and generalizability of their findings. The authors include no information to indicate how many community pharmacists were included in the sample, nor do they provide any details about recruitment or compensation methods. In addition, the authors offer no demographic information (eg, professional degree attained, years in practice, specialized training in asthma, type of practice site, geographic area of practice) about the subjects.

Although a single investigator evaluated the performance of each study subject, the literature suggests that some consideration should be given to the intrarater reliability of the observations.² Furthermore, it appears that evaluation steps were not prioritized. We would suggest that for a metered-dose inhaler, allowing time between puffs is relevant; in addition, for each device, an understanding of when it should be cleaned, refilled, or replaced represents important evaluation parameters, perhaps more so than some of the steps listed.

Although each of these issues is important for evaluating the usefulness of the study results, admittedly none directly influences the authors' suggestions that patients might be presenting to community pharmacists for education and counseling about the use of inhaler products and that pharmacists should have the ability to provide this information. Without the details noted above, however, the authors' conclusion that "[b]oth primary care physicians and specialists should not assume that their patients are receiving accurate instructions on the use of inhalation devices from their local pharmacist" is not well substantiated. Indeed, some pharmacists are involved in comprehensive disease management, providing education, recommendations about environmental control measures, and collaborative development of self-management and action plans for asthma.^{3,4} A potential limitation in providing these services, however, is the current lack of pharmacist compensation for educational activities. Commonly, a third-party payment to a pharmacy is reimbursement for a drug product's cost plus a fee for associated dispensing costs. This lack of support, in combination with the nationwide shortage of pharmacists, could result in an inability to provide value-added services on a consistent basis. Nevertheless, we are confident that instruction about the correct use of inhaler devices will continue to be included in school of pharmacy curricula and through continuing education programs for pharmacists.

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Reply

To the Editor:

We appreciate the comments of Ms Brock and Dr Williams¹ regarding our article entitled "The ability of the community pharmacist to learn the proper actuation techniques of inhaler devices".² We agree with several of the comments made, in particular with regard to the importance of allowing time between puffs of a metered dose inhaler (MDI) as well as an understanding of when the device should be cleaned or replaced. Speaking to this issue, we have recently presented (in abstract form) a report on patients' lack of knowledge with regard to how to determine when an MDI is empty.³ It should be noted, however, that the intent of this study was solely to examine baseline versus post-educational session changes in knowledge of the proper use of MDIs and dry powder inhalers (DPIs). To determine this score, we relied upon the package insert of each device.

With regard to the comments made about demographics of the pharmacists, our intent was to examine inhaler knowledge among "real-world" pharmacists. We did so by measuring these scores at local pharmacies, and we relied on pharmacists who were actively filling inhaler prescriptions. Although we agree that it would have been interesting to perform more intensive demographic analysis, this was not the intent of our study, which involved 30 pharmacists.

With regard to the comments made about the specialization of some pharmacists, we do not dispute this issue at all. We do, however, very strongly disagree and stand behind our statement that physicians should be concerned about the knowledge levels of general community pharmacists as demonstrated in the aforementioned study. They should, however, take heart, as recent studies demonstrate that pharmacists are not the only health care providers lacking in inhaler knowledge; this holds true as well for primary care physicians, residents in internal medicine, nurses, and, to a lesser degree, respiratory therapists.⁴ The intent of our article was not to vilify pharmacists but to awaken the medical community to the fact that it is not surprising that our patients lack knowledge in the proper use of inhalers when one examines such knowledge among health care providers. It also highlights the fact that the lack of baseline knowledge regarding DPIs is even greater. This is a significant issue, inasmuch as there has been a substantial rise in DPI use.

One positive note is the fact that this study demonstrated significant improvements in inhaler technique with proper education. I would think that Ms Brock and Dr Williams would find this encouraging, and I recommend that they consider this paper in their design of continuing education for community pharmacists.

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