

Barriers to Nonprescription Counseling: A Secret Shopper Learning Assignment

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Abstract

Objective: To assess whether a secret shopper learning assignment in a self-care and nonprescription medication course improves student understanding of barriers to nonprescription counseling.

Methods: Students self-selected community pharmacies to visit and play the role of a secret shopper. Following the pharmacy visit, each student wrote an essay describing their experience.

Results: Based on a review of 245 student essays, the most common barriers to nonprescription counseling were store layout and the attentiveness of the pharmacist. Students witnessed that they could see pharmacy personnel from the nonprescription medication aisle 57% of the time, but were offered assistance in selecting a product only 40% of the time. On average it took 6 minutes to receive an offer of assistance. Pharmacists who were more attentive and observant from their dispensing tasks were more likely to counsel the students than those who were not.

Conclusion: Following this experience, pharmacy students were able to articulate common barriers to nonprescription counseling and reflect on ways to overcome these barriers in order to enhance the pharmacist's role in assisting patients in the self-care area.

Key words: nonprescription, over-the-counter, pharmacy students, secret shopper, self-care

Introduction

Nonprescription medicines (NPMs), sometimes referred to as over-the-counter (OTC) medicines, account for the majority of all medications used in the United States. There are more than 100,000 OTC drug products on the market today representing about 1,000 significant active ingredients.¹ The availability of nonprescription products has grown considerably since 1976, as nearly 100 ingredients, dosages, or indications have made the "switch" from prescription to nonprescription status.² Currently, more than 700 products contain ingredients and dosages that were available only by prescription within the past 30 years.¹

A consumer survey conducted by Roper Starch in 2001 documented an emerging trend toward self-care. Americans say they are increasingly comfortable managing their own health care needs and the majority is more likely to treat themselves than seek physician care when they do not feel well. Seventy-seven percent of Americans take a nonprescription product to treat common everyday ailments. Starch's survey further revealed that 59% of Americans say they are now more likely to treat their own health condition than they were a year ago. Furthermore, 73% would rather treat themselves at home than see a doctor and 62% say they would like to do more of this in the future. An overwhelming majority (96%), say they are generally confident about the health care decisions they make for themselves.³

Emerging consumer confidence in medical self-care combined with the availability of more NPMs means consumers have increased exposure to a vast array of drugs without supervision and monitoring. This is particularly significant for those who suffer from chronic diseases, such as diabetes or hypertension, or otherwise take multiple prescription medicines that may preclude the safe use of many nonprescription products. Further, multiple published studies document that older adults may be unaware of adverse risks associated with NPMs if they are used incorrectly.^{4,5,6,7,8} This situation provides pharmacists with substantial opportunities to educate the public about self-care and to ensure that consumers use nonprescription medications safely and effectively. Though pharmacists are recognized as the most accessible health care professional, many consumers do not ask for advice on NPMs in their pharmacies.⁹ Patients could benefit from consulting with their pharmacists to learn what to expect from treatment, when to seek the advice from their primary care physician and navigate drug-drug interactions between prescription and NPMs.

Student pharmacists at the University of North Carolina at Chapel Hill are required to take a course titled, "Self-Care and Nonprescription Medications" during their second professional year. During this class students acquire knowledge of pharmacist-assisted self-care, nonprescription products and professional triage, consistent with standards and guidelines from the Accreditation Council for Pharmacy Education.¹⁰ While students graduate with the knowledge necessary to assist patients with self-care related issues, there is often a disconnect once they begin practicing because many patients do not seek their advice. Additionally, new practitioners may see NPM counseling as a distraction from other responsibilities, particularly for those for which they can receive third-party reimbursement. Because of this disconnect, an active-learning assignment was developed with the goal of increasing student understanding of the barriers to self-care counseling. The purpose of the assignment was to determine if a secret shopper experience conducted during the nonprescription medication course increases student understanding of barriers to nonprescription counseling.

Methods

The assignment consisted of 3 components. *First*, students had to devise a scenario whereby they were attempting to purchase a NPM for either themselves or for a family member. They were told that the patient in their scenario should have a known disease or medical history that would preclude using certain products in the chosen nonprescription medicine category. The example they were given was a patient (grandmother) with hypertension and a cold who seeks something to relieve nasal congestion. The students were also required to devise an appropriate medication history for the patient. To continue the

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example, the patient may take an ACE (Angiotensin-Converting Enzyme) Inhibitor for her hypertension and calcium carbonate for calcium supplementation.

In the *second* component of the assignment, students were to visit a pharmacy where they were not known to any of the employees. During this secret shopper visit they were to give the impression that they were a patient looking for a NPM. As they were perusing the OTC aisles, they were to mentally note barriers to nonprescription counseling. The students were instructed to spend a maximum of 15 minutes (no minimum time was given) in the area of the nonprescription medicine category they chose for their scenario. If no one asks if they need help, the students were to leave the store without any advice. If they were asked “if they needed help,” they were to pay attention to how long it took for someone to offer assistance. Also, they were to make note of who asked to assist them (e.g., the pharmacist, a technician, a clerk, etc.). The students were instructed to volunteer information only if asked. They were not to lead the employee into asking questions that they believed should be asked without prompting. The students were given the following example to help with their thought process:

Pharmacist: “Can I help you?”

Student: “Yes, I’m looking for something to help a stuffy nose.

Pharmacist: “Is it for you?”

Student: “No it’s for my grandmother, she has a cold.”

Pharmacist: “Has your grandmother tried anything yet?”

Student: “No, just acetaminophen (Tylenol)”

Pharmacist: “Does she have any medical conditions that you know about?”

Student: “Yes, she has high blood pressure?”

Pharmacist: “Is she being treated for it?”

Student: “Yes, she takes ramipril (Altace).”

The questions the students were to address are listed in Box 1. If the student was counseled about purchasing a particular product, they were to pay attention to what type of directions were given including follow-up suggestions. They were instructed to not take notes in the store or appear to be grading the interaction. Students were asked also to note, the layout of the store including the proximity of the nonprescription medicine section to the pharmacy during their visit, as well as the availability of products within the category of their scenario.

Box 1: Questions for component two of the assignment

Store Layout	<ol style="list-style-type: none"> 1) Would a patient perusing OTC products in this section be visible to the pharmacy personnel? 2) Where are the products in your chosen category placed in relation to the pharmacy counter? 3) Does the pharmacy appear to have a private counseling area? <ul style="list-style-type: none"> • If so, is there evidence that it is not routinely used (e.g. are there miscellaneous boxes or other items stored in this space)? • Did you have an opportunity to observe the space in use?
Product Selection	<ol style="list-style-type: none"> 4) Are there a number of products stocked in the category chosen for your scenario? 5) Are any products noticeably missing in the category?

For the *third* component of the assignment, students prepared an essay describing the experience. Specifically, they were told to, 1) provide the context and/or outline the scenario they devised for the assignment, 2) identify the pharmacy visited and the time of day of their visit, 3) answer the questions

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outlined in the *second* component of the assignment, and 4) if they were assisted they were to describe the interaction, according to the guidelines in the previous paragraphs.

This study was approved by the University of North Carolina's Institutional Review Board (IRB).

Results

There were 245 second-year professional students (123 in 2005 and 122 in 2006) that completed the secret shopper assignment. Student demographics are shown in Table 1. The majority of students (97%) adhered to the assignment guidelines and devised a scenario where the suspected patient had a known disease or medical history that would preclude using certain products in the chosen nonprescription medicine category. Most students devised scenarios related to a family member (e.g., looking for a product for their mother, father, brother or sister). For example, a couple of students devised scenarios where their mother/father had diabetes and they needed a foot care product. Another recurring example was an elderly family member who needed something for a cold/cough.

Table 1: Demographic characteristics of students (N=245)

Sex:	Number (%)
Female	174 (71%)
Male	71 (29%)
<i>Work experience in a community pharmacy:</i>	
Yes	132 (54%)
No	113 (46%)

Of those pharmacies visited, 23% were mass merchandisers, 60% were chain, 6% were grocery, and 11% were independents. Since students were not assigned to a particular pharmacy, some stores were visited by more than one student. Table 2 shows the number of stores visited and the number of students who visited each of those stores. The students also reported the time of day they visited the pharmacy. Times varied greatly and there was not a correlation between time of day and whether or not the students were acknowledged and helped by pharmacy personnel.

Table 2: Student visits to pharmacies

Type of pharmacy visited	Mass merchandiser	Chain	Grocery	Independent
students who visited this type of pharmacy	23% (n=56)	60% (n=147)	6% (n=15)	11% (n=27)
number of stores visited	7	105	14	25

It was evident from reading the essays that most students believed that store layout and the attentiveness of the pharmacist were keys to the importance and accessibility to OTC counseling. Students witnessed that the OTC aisle was visible 57% of the time to pharmacy staff for all the locations combined. Independents had the best visibility (89%) and mass merchandisers were the least visible to pharmacy personnel (23%). Table 3 shows a breakdown of how these rates differed from pharmacy location visited.

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Table 3: Students experience varied with type of pharmacy visited

	Mass merchandiser Store	Chain Store	Grocery Store	Independent Store
students could see pharmacy staff from the OTC aisle	23% (n=13)	43% (n=63)	73% (n=11)	89% (n=24)
students offered assistance	18% (n=10)	20% (n=29)	47% (n=7)	74% (n=20)
students counseled	13% (n=7)	18% (n=26)	27% (n=4)	74% (n=20)
time that student who was offered assistance was also counseled	70%	90%	57%	100%

The student was offered assistance about 40% of the time across all pharmacy locations. Personnel from independent pharmacies offered assistance 74% of the time and mass merchandiser personnel offered assistance only 18% of the time. The average time it took for the pharmacy student to be approached for assistance was 6 minutes and the majority of the time (82%) a clerk or a technician was the one asking if the student needed help. The pharmacist initiated self-care assistance only 18% of the time.

Students who were offered assistance were counseled an average of 79% of the time, 100% in independent pharmacies, 90% in chain pharmacies, 70% in mass merchandiser pharmacies, and 57% in grocery store pharmacies. Of those students who were counseled, all were provided a specific product recommendation for their scenario. The recommendations were appropriate 81% of the time. For those recommendations that were inappropriate the students noted that the person conducting the counseling did not inquire about medical history or other medications that precluded the use of the NPM chosen. Approximately 50% of students were given directions on how to use the product, but only 4% were given instructions on when to follow-up with a primary care physician or pharmacist.

Another interesting finding from the essays was that students noted that the counseling was done by a pharmacist only 25% of the time. The other times the counseling was provided by a technician, a clerk, a pharmacy student or someone whose role was not apparent to the student.

Students reported that the pharmacies had appropriate products within the category of their scenario. The students visiting independent stores noted that the nonprescription product selection was not as vast as chain stores they were familiar with, but was adequate.

Discussion

This study was conducted to determine if a secret shopper learning activity in the nonprescription medication course increases student understanding of barriers to nonprescription counseling. It was undertaken in response to increasing evidence that consumers with chronic diseases or otherwise taking multiple prescription medicines that may preclude the safe use of many nonprescription products, frequently self-medicate for minor illnesses without benefit of consultation with a health care provider. Because many consumers do not solicit NPM related advice from either a physician or a pharmacist, it is essential that pharmacists actively seek to identify these individuals and take advantage of the opportunity to educate the public about self-care and nonprescription products.

When pharmacy students graduate from an accredited program they must be knowledgeable in the self-care area. The Accreditation Council for Pharmacy Education standards does not address models of pharmacy practice that preclude students from using this knowledge. This secret shopper active-learning assignment was required of students to make them more aware of how consumers feel when they are perusing the OTC aisles and what factors inhibit pharmacists from taking a more proactive role in this

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area. Students were surprised that the OTC aisles were not visible from the pharmacy making patient interaction and pharmaceutical care more difficult.

Upon completion of this assignment, the results were discussed in class and shared with the students. From this experience students realized that the pharmacy personnel at independent pharmacies were usually more visible to patients and therefore were more likely to assist and counsel their patients with OTC product selection. They also learned that visibility of the pharmacy personnel is not the only factor that plays a role for patients to receive assistance and counseling. Grocery store pharmacy personnel were visible to the secret shoppers 73% of the time, but only 27% of the "patients" were counseled. A common theme noted throughout the essays was the attentiveness of the pharmacist, which was a deciding factor in whether counseling was received or not. Pharmacists who observed the nonprescription aisles from the dispensing location were more likely to counsel the students. This was true across all pharmacy settings.

Students also realized how long patients need to peruse an OTC aisle before assistance is offered. The average time was 6 minutes. Some students were offered assistance within the first 2 minutes and many had to wander the OTC aisles for more than 10 minutes. Those students who perused the aisles for more than 10 minutes stated in their essays that they would not have waited that long if they were a real patient; therefore, proving that students understood the importance of helping a patient sooner rather than later.

Students also wrote in the essays that they felt having an in-depth knowledge of OTC products and an ability to communicate this information to patients were important traits for community pharmacists. They understand the need to ask probing questions to determine that the patient is taking the correct medication for them since 19% of the students were counseled incorrectly. They also understood the need for a follow-up with patients regarding self-care treatment, since only 4% of students were told what to do if the recommendation did not help them.

Limitations

Students were told not to approach the pharmacy for assistance so they could assess the proactive nature of the pharmacy to provide pharmacist-assisted self-care. In usual practice, pharmacists would more than likely counsel the patients who asked specific questions at the pharmacy counter.

The data reports that counseling was done by a pharmacist only 25% of the time. In some instances students did not know who was counseling them because the name tag of the employee did not differentiate between a clerk, a technician or a student. Since there are 2 other schools of pharmacy in North Carolina, it is possible that some of the counseling was done by a pharmacy student from another school. It is difficult to determine who did the counseling since most personnel did not introduce themselves (including the pharmacists).

Since data for this study was collected based on the reflective essays written by students, it is possible that the author misinterpreted results as they were written by the students. In some cases the author had to make assumptions about what the students wrote which could have led to some biased results.

Conclusion

As the number of nonprescription products entering the market increases, the information that students learn about counseling OTC products becomes increasingly important, especially for students planning a career in community pharmacy. There is need for active learning experiences in pharmacy curricula that help students develop knowledge, skills and attitudes necessary to promote safe and effective use of nonprescription medications. For the benefit of patients, pharmacists should continue to embrace the role of educator in this arena of self-care. Increasing our knowledge in this area is only one piece of the puzzle. Pharmacists must also become aware of the barriers to providing pharmacist-assisted self-care

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so they can be more visible and inviting to patients for this service and ultimately assure the safety of the medications their patients are taking. This active-learning assignment helped students realize how helpless a consumer can feel and made them more aware of their need to monitor their surroundings when performing dispensing functions.

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