The power of the patient question: A secret shopper study

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A B S T R A C T

Objectives: To examine the effect of one standardized patient question on the length, number and type of new topics pharmacists addressed. To explore how community pharmacists counsel secret shoppers on two types of over-the-counter (OTC) medications—ibuprofen (IB) and emergency contraceptives (EC).
Methods: 25 pharmacists from 7 independent, midwestern community pharmacies consented to have secret shoppers purchase an OTC medication and to have their consultations audio-recorded. Following standardized scenarios, 5 secret shoppers audio-recorded 73 encounters. At the end of 36 encounters secret shoppers asked one standard question, *"What else should I know before taking this product?"* Role Theory informed the study design with apriori hypotheses that topics assessed, topics discussed, and consultation length would vary by the OTC medication (IB or EC) and whether secret shoppers asked a question. Audio-recording coding had high inter-rater reliability (kappa = 0.94).
Results: Length of encounter was significantly associated with patients asking the question (p < 0.05), but not type of OTC medication. On average 1.22 new topics were discussed with a patient question. New topics included information about safe and efficacious use of the OTC's.
Conclusion: Results highlight the importance of encouraging patients to ask pharmacists their questions about OTC products for safe use and thorough consultations.

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1. Introduction

Around 89 drugs have switched from prescription to over-the-counter (OTC) status from 1976 to 2005 [1]. Furthermore, the CDC estimates, "35% of adult Americans use OTC medications on a regular basis, and there is a trend for increasing use as more drugs move from prescription to OTC status" [2]. Pharmacists are an important resource for patients regarding prescription and OTC medications [3–7]. As drug experts and one of the most accessible healthcare providers to patients, they are in a key position to collaborate with patients in making decisions regarding safe and proper use of OTC medications [8,9].

Although OTC counseling techniques have been suggested, research on actual OTC counseling practices in community pharmacy settings is scarce [1,2,10–13]. This study contributes to the literature by providing a descriptive analysis of how pharmacists counsel patients on two OTC medications (Ibuprofen and Emergency Contraceptives) which vary in consultation

sensitivity. Building on previous prescription consultation research, consultations in this study were examined or "measured" in terms of content assessed and discussed during the consultation as well as the overall length of the consultation [11–13].

Earlier work posited the importance of engaging patients as partners with their health care providers in pharmacies as well as other settings [14,15]. However, it is unclear how to accomplish this. This study builds on role theory to explore the impact of inserting one patient question at the end of the pharmacist-patient encounter. If pharmacists perceive the patient as wanting information would pharmacists offer more information to patients?

This study extends methodologies for OTC counseling research by creating and establishing a reliable protocol and tools for audio-recorded consultations via simulated patients or "secret shoppers." To the best of the researchers' knowledge, this will be the first study using simulated patients to audio-record pharmacist-patient communication regarding OTC medications in the United States [11–13].

The goal of this study, as part of a larger secret shopper study on OTC medications, is to explore how pharmacists react to secret shoppers who ask a standardized question during an OTC consult for either ibuprofen or emergency contraceptives. Specific aims

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include: (1) explore the relationship between the secret shopper initiating the standardized question and both the topics discussed and length of the consultation, (2a) assess whether (or not) new information was provided by the pharmacist after the question and (2b) if so, identify how many new topics were assessed and/or discussed and which new topics were most frequently addressed. New topics were defined as topics that were not addressed before the standardized question.

2. Methods

To achieve the study's goal, this research observed how community pharmacists counseled secret shoppers requesting emergency contraceptives or Ibuprofen, without or with a standardized patient question at the end of the consultation. We hypothesized that adding the secret shopper's standardized question would increase the length and the number of topics pharmacists covered during the encounter. We also hypothesized consultation length would differ based on the type of medication. The University of Wisconsin-Madison's Institutional Research Board (IRB) granted ethics approval for this study.

2.1. Pharmacy recruitment & consent

Eight independent, midwestern community pharmacies selling OTC products were approached to participate in this study. To be eligible for the study, emergency contraceptives and ibuprofen had to be visible either in front or behind the pharmacy counter. Following IRB approved procedures, pharmacists were told that within the next 6 months a secret shopper would purchase an OTC medication and audio record the pharmacist-patient interaction. The name and types of OTC products to be purchased by the secret shoppers were not disclosed to the pharmacists.

Seven out of eight (87.5%) of the approached pharmacy managers agreed to participate in the study. One pharmacy manager declined our invitation and did not disclose why they chose not to participate. All 25 (100%) of the approached individual pharmacists agreed to participate at the seven pharmacies.

2.2. Study design

A factorial design was used where each of the 25 consenting pharmacists could at maximum potentially have four different secret shopper encounters: female EC, female IB, male EC, and male IB. See Table 1 to see the four basic scripts. In half of the encounters the secret shopper asked the following question: **"What else should I (or my girlfriend) know before taking this product?"** This neutral open-ended question at the end of the consult allowed us to examine where the pharmacist naturally directed the consultation without a "leading question". The pharmacist had an opportunity to address any information they believed was particularly important to know about the OTC product. No other patient questions were asked in the encounter. To ensure an equal number of encounters with and without the standardized question, secret shoppers asked the standardized question in the first 36 encounters. Once 36 encounters were completed with the standardized question, secret shoppers omitted the question in the subsequent 37 encounters.

The five secret shoppers (3 women and 2 men) and scenarios were assigned to achieve a balance across secret shopper gender, pharmacist gender, product purchased, and whether or not the secret shopper was assigned to ask the question. Secret shoppers were rotated throughout the seven different pharmacy locations and scripts so the same secret shopper wouldn't visit the same pharmacy in two consecutive encounters. Nor would the same scenario be presented more than once. This factorial design allowed for a maximum of 100 encounters with pharmacists without repetition of the secret shopper scenarios. Most sites had three taped scripted encounters.

All secret shoppers underwent standardized training to perform each scenario consistently. Secret shoppers first watched video recordings of modeled encounters with each of the scripts using a mock pharmacist and patient. Subsequently, secret shoppers role played each script with the lead researcher and received feedback on their performances to promote accuracy of the script delivery. Lastly, secret shoppers went on a "dry run" where they practiced the scenario without recording the encounter in a community pharmacy not enrolled in the study. The lead researcher observed the "dry runs" to ensure scripts were delivered verbatim. During data collection, secret shoppers' encounters were audio recorded and regularly monitored throughout the study assuring fidelity.

2.3. Audio recording consults

Consults were audio recorded on a small key chain recorder. The recorder and key chain were discretely concealed in the palm of the secret shopper's closed hand. Recordings were uploaded to Box, a private data storage server, following approved university HIPPA procedures. Completed audio recordings were given codes and linked to their corresponding surveys for the purpose of analysis. A logbook with completed scenarios was up-dated after every pharmacy visit to ensure that pharmacists never had the same scenario twice. Secret shoppers were told to ask the pharmacist for

Table 1
Scenarios by Secret Shopper Gender and Type of Product (EC or IB).

Secret Shopper Gender	Product (EC or IB)	Scenario
Female	EC	18-year-old female who had sex and is seeking emergency contraceptives to avoid an unplanned pregnancy. Upon questioning, the customer reveals her primary method of birth control failed (meaning the condom she and her partner used broke). She has had no prior experience with using EC (or other hormonal birth control) and would like more information
Female	IB	Young woman was playing basketball yesterday and hurt her knee. She is still experiencing pain and needs an immediate solution. She rarely takes painkillers and it's been a while since she has used them last. She comes into the pharmacy asking for OTC painkillers for pain relief until she sees her doctor tomorrow
Male	EC	18-year-old male who had sex with his girlfriend (who is the same age) and is seeking emergency contraceptives to avoid an unplanned pregnancy. Upon questioning, the customer reveals his primary method of birth control failed (meaning the condom he and his partner used broke) and he wants to purchase EC to avoid an unintended pregnancy. His girlfriend has had no prior experience using EC and both he and his girlfriend would like more information
Male	IB	Young man was playing basketball yesterday and hurt his knee. He is still experiencing pain and needs an immediate solution. He rarely takes painkillers and it's been a while since he has used them last. He comes into the pharmacy asking for OTC painkillers for pain relief until he sees his doctor tomorrow