



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of the American Pharmacists Association

journal homepage: www.japha.org

RESEARCH NOTES

Exploring pharmacists' perceptions regarding influenza and streptococcal testing within a chain pharmacy

Kelli Dulaney*, Kenneth Hohmeier, Cindy Fisher, Lindsey Cardosi, Mike Wasson

ARTICLE INFO

Article history:

Received 7 December 2017

Accepted 25 March 2018

Available online 22 April 2018

ABSTRACT

Objectives: To assess pharmacists' perceptions of point-of-care testing (POCT) and treatment for influenza and streptococcus pharyngitis in a community pharmacy setting. A secondary objective was to explore the correlation between demographic data and survey responses.

Methods: An anonymous electronic Likert-type-scale questionnaire was sent to pharmacists in a division of a large national supermarket chain pharmacy in western Tennessee, Mississippi, and Arkansas. This survey was e-mailed with the use of Qualtrics Survey Software and administered from November 28, 2016, to December 31, 2016. It included questions that explored pharmacists' willingness to perform influenza and streptococcus pharyngitis POCT as well as to recommend and provide appropriate treatment. The survey also collected demographic information including age, education, and number of years practicing at current site. The survey was reviewed by a convenience sample of pharmacists in a large national supermarket chain and revised based on their feedback. Descriptive statistics were used to evaluate quantitative participant responses.

Results: The electronic survey was distributed to 379 pharmacists, and the response rate for the survey was 39% (146/379). This study found that 69% either strongly agreed or agreed to be willing to perform POCT in a community pharmacy setting, and 86% either strongly agreed or agreed to be willing to recommend appropriate treatment for influenza and streptococcal pharyngitis. Secondly, the majority of participants either strongly agreed (27%) or agreed (52%) that they possessed the clinical knowledge to treat these infections. In addition, 32% strongly agreed and 52% agreed that their staff could be trained to assist with these services. Finally, 66% either strongly agreed or agreed there were barriers to implementing this service.

Conclusion: This survey provided insight into pharmacists' perceptions of providing influenza and streptococcal pharyngitis POCT in their pharmacy and demonstrated that a majority were willing to provide treatment.

© 2018 American Pharmacists Association®. Published by Elsevier Inc. All rights reserved.

Influenza and streptococcal pharyngitis are common illnesses that affect millions of people annually. Since 2010, there have been 9.2 to 60.8 million cases of influenza annually.¹ The Centers for Disease Control and Prevention reports that there are 11,000 to 13,000 group A streptococcal pharyngitis cases every year.² Many people who die from complications from influenza are either not tested for influenza or seek medical care

later in their illness.³ In addition, 25 of every 100,000 adults 65 years of age or older obtain group B streptococcal pharyngitis.⁴

Approximately 95% of Americans live within 5 miles of a community pharmacy.⁵ Community pharmacists are therefore in an ideal setting to actively screen and recommend appropriate treatment for both infectious diseases. Not only would such point-of-care testing (POCT) increase patients' access to care and treatment, but it would also continue to further expand the perception of community pharmacists as health care providers and partners in improving public health.^{6–8}

Community pharmacists can facilitate patient access to testing and actively screen and monitor patients for acute conditions.⁶ Perceptions of patients and pharmacists have been assessed regarding various POCT services, demonstrating that both patients and pharmacists were willing to receive and

Disclosure: None.

Previous presentations: American Pharmacists Association Annual Meeting, San Francisco, CA, March 26, 2017, and Research in Education and Practice Symposium, Chapel Hill, NC, May 22, 2017.

* **Correspondence:** Kelli Dulaney, 1335 Coppershire Cove North, Apt. 304, Germantown, TN 38138.

E-mail address: kellidulaney@gmail.com (K. Dulaney).

perform the test, respectively.^{9,10} Despite growing evidence of benefit, widespread POCT implementation has not been recognized, and there is limited research about pharmacists' perceptions regarding the implementation of influenza and streptococcal pharyngitis POCT in the community pharmacy workflow.

Objectives

The primary objective of this study was to assess community pharmacists' perceptions of influenza and streptococcus pharyngitis POCT and corresponding treatment for either infection in the Delta region of the United States. A secondary objective was to observe the correlation between demographic data and survey responses.

Methods

An anonymous electronic Likert-type-scale questionnaire (Appendix A) was sent to every pharmacist in a division of a large national supermarket chain pharmacy in western Tennessee, Mississippi, and Arkansas. This survey was e-mailed with the use of Qualtrics Survey Software (Qualtrics, Provo, UT) and administered from November 28, 2016, to December 31, 2016. The survey was sent electronically 3 times during this time period to pharmacists' e-mails to remind them to complete the survey. An expert panel of 8 pharmacists and 5 pharmacy researchers created the survey instrument. The first 5 closed-ended questions included domains that explored pharmacists' willingness to perform influenza and streptococcus pharyngitis POCT, willingness to recommend and provide appropriate treatment for either infection, perception that they possess the clinical knowledge to treat either infection, perception that their staff could be adequately trained to assist with the support of influenza and streptococcal pharyngitis POCT, and perception that barriers were present to implementing influenza and streptococcal pharyngitis POCT in their pharmacy.

There was also an open-ended question that allowed the pharmacist to list potential barriers, in order of importance, to implementing influenza and streptococcal pharyngitis POCT in their pharmacy. The survey collected demographic information including age, education, number of years practicing pharmacy, and number of years practicing at their current site. The survey was reviewed by a convenience sample of pharmacists in the large national supermarket chain and revised based on their feedback for content and clarity. Inclusion criteria included all pharmacists who were employed by this large supermarket chain pharmacy.

Qualtrics Survey Software was used to compile the survey responses. Descriptive statistics were used to evaluate the closed-ended questions, and a thematic analysis was used to analyze the open-ended question by means of a grounded theory approach. A consent statement was included at the beginning of the survey. Approval for this project was granted by the University of Tennessee Health Science Center (UTHSC) Institutional Review Board on November 8, 2016.

Currently, every pharmacist in this large national supermarket chain pharmacy, which consists of 95 pharmacies, has been trained and actively performs blood glucose and blood cholesterol POCT during certain seasons of the year. In

Table 1
Demographic information of survey respondents, n (%)

Characteristic	Number of participants completing the survey question (n = 146)
Age range, y	n = 143
25–30	53 (37.1%)
31–40	52 (36.4%)
41–50	22 (15.4%)
≥51	16 (11.2%)
Degree	n = 139
Bachelor of Pharmacy	18 (12.9%)
Doctor of Pharmacy	121 (87.1%)
Number of years in practice	n = 142
<5	43 (30.3%)
5–10	42 (29.6%)
10–20	37 (26.1%)
>20	20 (14.1%)
On most days of the week, there are more than 1 pharmacist present during my working shift	n = 141
Yes	106 (75.2%)
No	35 (24.8%)

addition to offering POCT services, all pharmacists recommend and administer immunizations and provide medication therapy management services.

Results

The electronic survey was distributed to 379 pharmacists, and 157 responded. There were 146 surveys included in the analysis after 11 surveys were excluded owing to incomplete responses. The response rate for the survey was therefore 39% (146/379).

Table 1 summarizes the participant characteristics collected. The majority of pharmacists were 25 to 40 years of age (105/143) and had a doctor of pharmacy degree (121/139). There was a reasonably even spread of years practiced among the participants that completed the survey.

Table 2 summarizes participants' perceptions regarding influenza and streptococcal pharyngitis testing within their pharmacy. Overall, this study found that 69% (100/145) of participants either strongly agreed or agreed that they would be willing to perform POCT in a community pharmacy setting. For willingness to recommend appropriate treatment, 42% (61/146) strongly agreed, and 44% (64/146) agreed to make these treatment recommendations for either influenza or streptococcal pharyngitis. In terms of pharmacist age groups, 40% (40/99) of participants 25–30 years of age either strongly agreed or agreed they would be willing to perform either POCT compared with 9% (9/99) of participants 51 years of age and older.

Table 2 also contains results regarding the correlation between pharmacists' perception that barriers are present to implementing these POCT services in their pharmacy to their age and highest degree in pharmacy. When asked about possessing the clinical knowledge to treat either infection, 27% (39/146) strongly agreed, and 52% (76/146) agreed that they possessed the clinical knowledge to treat either infection as shown in Table 2. In addition, 32% (39/124) strongly agreed and 52% (64/124) agreed that their staff could be adequately trained to assist with the support of both POCT.

Download English Version:

<https://daneshyari.com/en/article/8531793>

Download Persian Version:

<https://daneshyari.com/article/8531793>

[Daneshyari.com](https://daneshyari.com)