



Prevalence and Barriers of COVID-19 Testing Services at Community Pharmacies in Southern California

Vivian Ly, Student Pharmacist; Karl M. Hess, PharmD, APh, FCPHA, FAPhA
Chapman University School of Pharmacy
Irvine, CA



BACKGROUND

- Community pharmacists are highly accessible to the public and played a crucial role during the COVID-19 pandemic, including providing COVID-19 testing
- Increased access to COVID-19 testing in community pharmacies can help measure and monitor the spread of COVID-19 and identify positive cases in the community
- Despite this, the current prevalence and perceived barriers to COVID-19 testing in community pharmacies has not been well evaluated

OBJECTIVES

- The purpose of this research is to 1) identify factors surrounding community pharmacy's ability and willingness to implement COVID-19 testing and 2) understand to what extent COVID-19 testing exists in Southern California

METHODS

- IRB approved under the exempt research category
- A spreadsheet of pharmacies was obtained from the California Department of Consumer Affairs website and ten pharmacies from each of the ten Southern California counties were randomly selected via an online random number generator to be surveyed from September 2022 to December 2022. n=100 sample size
- During this time, phone calls were initiated to pharmacies where pharmacists had the option of completing a web-based Qualtrics survey either over the phone with the investigator or having it sent by email to complete later
- This research method was modified due to inefficiency with only one researcher conducting calls
- From January 2023 to March 2023, this same survey was instead emailed Southern California pharmacists through the California Pharmacist Association (CPhA) email distribution list. N=867 sample size
- CPhA sent a follow up emails to remind pharmacists who had not yet filled out the survey to take it
- Data was descriptively analyzed in the aggregate using Qualtrics by comparing pharmacies that had implemented COVID-19 testing to those that had not implemented COVID-19 testing

For more statistics
and poster updates
visit the QR code:



FIGURES & TABLES

Table 1. Respondent Demographics, n(%)

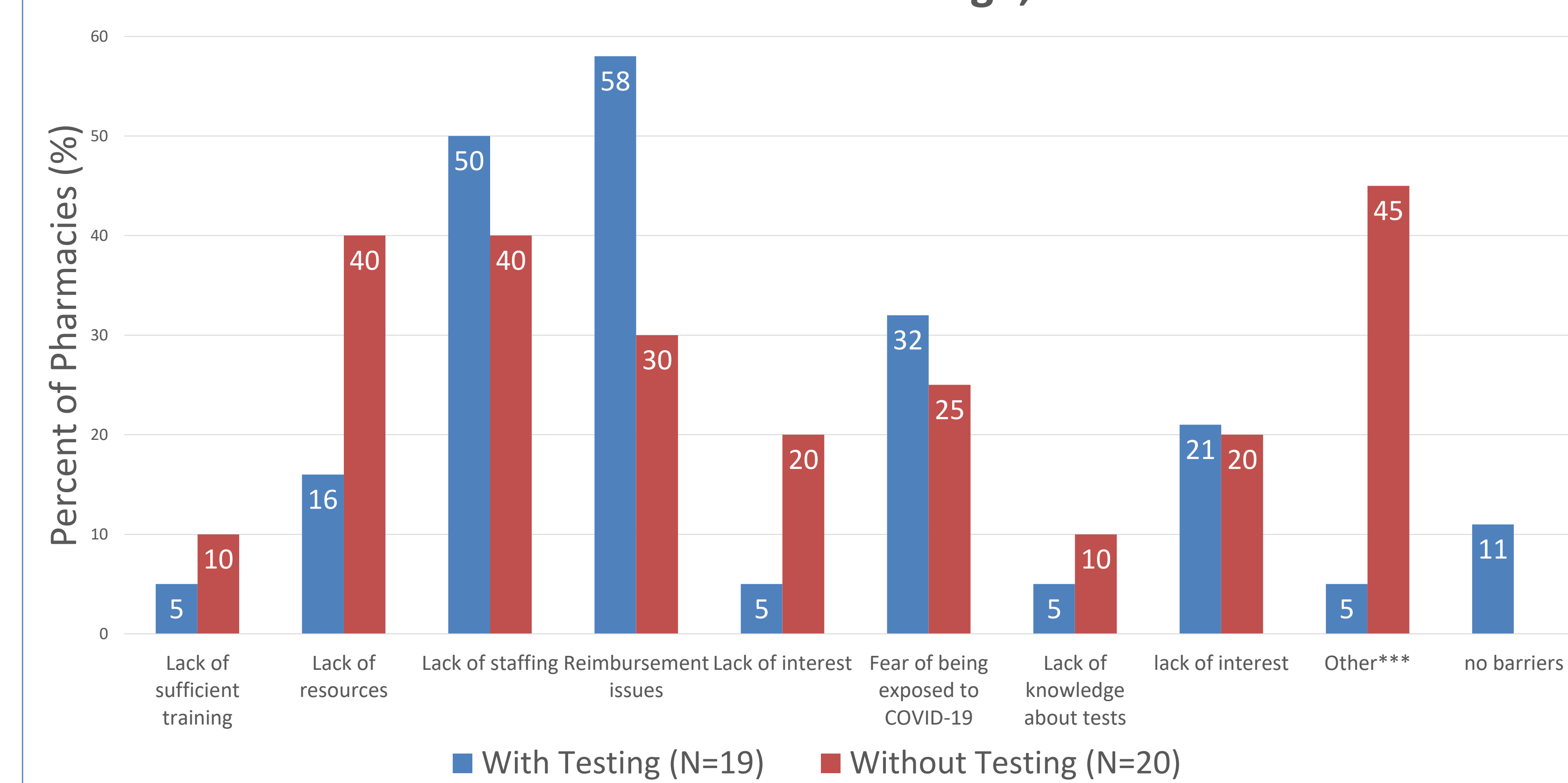
	Total (n = 35)	With Testing (n = 16)	Without Testing (n = 19)
County			
Los Angeles	15 (42.9%)	8 (50%)	7 (36.8%)
Orange	8 (22.9%)	3 (18.8%)	5 (26.3%)
Riverside	4 (11.4%)	3 (18.8%)	1 (5.3%)
San Bernadino	4 (11.4%)	2 (12.5%)	2 (10.5%)
San Diego	1 (2.9%)	0 (0%)	1 (5.3%)
Santa Barbara	2 (5.7%)	0 (0%)	2 (10.5%)
Ventura	1 (2.9%)	0 (0%)	1 (5.3%)
Type of Pharmacy			
Retail Chain	14 (40%)	5 (31.2%)	9 (47.4%)
Independent	20 (57.1%)	11 (68.8%)	9 (47.4%)
Other	1 (2.9%)	0 (0%)	1 (5.2%)
Pharmacy Location			
Urban	11 (31.4%)	7 (43.8%)	4 (21.1%)
Suburban	24 (68.6%)	9 (56.2%)	15 (78.9%)
Average Prescription Volume per Day			
<100	2 (5.7%)	1 (6.3%)	1 (5.3%)
100-200	14 (40%)	5 (32.2%)	9 (47.4%)
201-300	9 (25.7%)	4 (25.0%)	5 (26.3%)
>300	10 (28.6%)	6 (37.5%)	4 (21.0%)

Table 2. Testing Demographics, n(%)

	COVID-19 Testing Demographics (n = 16)
Types of testing offered*	
Rapid tests (pharmacy administered)	11 (32.4%)
Rapid tests (patient administered)	6 (17.6%)
Lab tests (pharmacy administered)	7 (20.6%)
Lab tests (patient administered)	10 (29.4%)
Service type	
Walk-in only	4 (25%)
Appointment only	2 (12.5%)
Both	10 (62.5%)
Tests administered per day	
<5	10 (62.5%)
5-10	3 (18.7%)
11-15	2 (12.5%)
>15	1 (6.3%)

*Total percentages exceed 100% due to select all that apply options

Figure 1: Comparing Challenges/Barriers in Pharmacies With or Without Testing*, **



*Total percentages exceed 100% due to select all that apply options

**Sample size for the figure is larger than that of the tables because self-reporting demographics were optional on the survey

***Other barriers with a fill in the blank option included limited COVID-19 test availability, lack of drive throughs, lack of space, and presence of other nearby testing facilities such as urgent cares

RESULTS

- The data is based off of a total of 41 responses from Southern California pharmacies, 10 from calling and 31 from the CPhA survey, resulting in a total response rate of 4.6%
- 38.9% of pharmacies that did not currently offer testing would like to offer COVID-19 testing in the future
- Pharmacies with testing appear to be more likely than pharmacies without testing to provide other patient care services such as furnishing naloxone (75% vs 52%) and birth control (68.8% vs 50%)
- Other services provided by both groups include furnishing travel health medications (12), tobacco cessation products (12), HIV PEP/PEP (10), and conducting blood pressure blood glucose, and cholesterol screenings (1)
- 26.3% of pharmacies without testing also do not provide any additional patient care services

DISCUSSION

- The majority of responses came from pharmacies in Los Angeles and Orange Counties, primarily were independent community pharmacies located in suburban areas, with a daily prescription count of between 100 and 200
- The most common barriers to COVID-19 testing included reimbursement issues, lack of staffing, and lack of resources at the pharmacy
- Pharmacies that provided testing appeared to be under-utilized with most administering less than five tests a day

LIMITATIONS

- Selection bias may be present since pharmacists may have chosen to not take the survey if their pharmacy did not offer testing
- Response rate for pharmacy phone calls was dependent on pharmacist availability at the time of call
- Generalizability of results may also be limited since responses were primary from Los Angeles and Orange Counties and the survey had a low overall response rate

CONCLUSIONS

- While the continued relevance of COVID-19 testing may have been diminished due to the amount of time that has passed since the start of the pandemic, this research provides insight into COVID-19 testing that has not been done previously
- COVID-19 testing is currently an under-utilized service but is still relevant as the pandemic shifts into an endemic phase
- More surveying should be conducted to better determine the prevalence of testing in community pharmacies and barriers to testing services
- Using community pharmacies as destinations for testing and other patient care services should be expanded given the number of community pharmacies present and their relative accessibility to the public