"Evaluation of pharmacists’ awareness of illegal online pharmacies and perceived impact on safe access to medicines."

The primary objective of this study is to determine gaps in knowledge and recognition of the negative clinical and safety impact associated with illegal internet pharmacies by licensed pharmacists. This research is being conducted through the American Pharmacists Association in partnership with the Alliance for Safe Online Pharmacies.

Responding to this questionnaire is voluntary. Please indicate that you consent to participating in this study:

☐ I consent to participate.

For the following questions, please consider the definitions of an illegal and legal internet pharmacy:

In the U.S., a pharmacy website is classified as illegal when any of the following are true:

- Prescription only medicines are being offered to patients without requiring a valid prescription;
- The entity is not licensed as a pharmacy in the state where the patient is located;
- The medicines offered have not been approved for sale to Americans by the U.S. Food and Drug Administration, or are otherwise counterfeit, misbranded, or adulterated.
- The medicines are not dispensed by a pharmacist licensed or otherwise recognized in the patient's jurisdiction.

A pharmacy website is legal if it complies with all legal standards, which include (but not limited to) the following:

- Holds a valid pharmacy license in all jurisdictions where it offers to ship medicine to patients;
- Abides by all relevant prescription drug, controlled substance, and privacy laws;
- Employs providers who have a clean disciplinary record;
- Dispenses or offers to dispense FDA-approved prescription drugs only upon receipt of a valid prescription;
- Displays an accurate street address for the dispensing pharmacy or pharmacies; and
- Is not affiliated with any entity that violates legal pharmacy-related practice standards.

**Proposed Line of Questioning**

1. Prior to reviewing this survey instrument, did you know about the existence of illegal internet pharmacies?
   - ☐ Yes
   - ☐ No

2. Where did you learn about illegal internet pharmacies (select all that apply)?
   - ☐ Workplace
   - ☐ Colleague(s)
   - ☐ Independent education
   - ☐ News Media
   - ☐ National Association of Boards of Pharmacy Conference or Publication
   - ☐ Professional Pharmacy Conference or Publication
   - ☐ Other (specify) __________
3. At your current practice site, are you provided training to properly educate patients about illegal internet pharmacies?

- Yes
- No

[IF YES] What kind of training is provided?

4. The World Health Organization estimates 50% of medications sold by illegal online pharmacies are counterfeit (substandard/falsified). How often do you discuss the risks of counterfeit medications with your patients and/or caregivers?

- Regularly, with every or the vast majority of patients
- Often, with greater than 50% of patients
- Sometimes, with less than 50% of patients
- Rarely, with few patients
- Never

5. What percentage of online pharmacy websites do you believe are acting out of compliance with state and federal law and relevant pharmacy practice standards, including the advertisement and sale of counterfeit or unapproved drugs or the distribution of pharmaceutical products without a valid prescription?

- 0-20%
- 21-40%
- 41-60%
- 61-80%
- 81-100%

6. How often do you discuss with patients where they obtain their medications (e.g. local pharmacy, mail-order, online pharmacy) during counseling interactions?

- Regularly, with every or the vast majority of patients
- Often, with greater than 50% of patients
- Sometimes, with less than 50% of patients
- Rarely, with few patients
- Never

7. Are you aware of any patients or caregivers that have purchased over-the-counter (non-prescription) medicines from an online pharmacy in the past?

- Yes
- No

7A. [IF YES] Were you aware of the types or quantities of medications purchased? Yes/No

7B. Please explain how you became aware of the types or quantities of medications purchased.
8. Are you aware of any patients or caregivers that have purchased prescription drugs from an online pharmacy in the past?
   ○ Yes
   ○ No

8A. [IF YES] Were you aware of the types or quantities of medications purchased? Yes/No
8B. Please explain how you became aware of the types or quantities of medications purchased.

9. Are you aware of any patients or caregivers that have purchased dietary supplements or similar-type products, including CBD-based products, from an online pharmacy in the past?
   ○ Yes
   ○ No

9A. [IF YES] Were you aware of the types or quantities of products purchased? Yes/No
9B. Please explain how you became aware of the types or quantities of medications purchased.

10. If a patient under your care has ever purchased prescription drugs, over-the-counter medicines, or dietary supplements or similar type products (including CBD-based products) from an online pharmacy, are you aware of any adverse impact experienced by the purchaser (e.g. related to health or financial well-being)?
   ○ Yes
   ○ No
   ○ Prefer not to answer.

10A. [IF YES] Please provide additional information about the adverse impact experienced by the purchaser.

11. Have you ever recommended an online pharmacy website to a patient or caregiver?
   ○ Yes
   ○ No

11A. [IF YES] Please explain the types and/or quantities of medications discussed.
11B. [IF YES] Please provide the specific websites that were recommended and why.
12. Please indicate how confident you are in your own knowledge of each of the following topics:

| Topic                                                        | Not at all Confident | Not Too Confident | Somewhat Confident | Very Confident |
|--------------------------------------------------------------|----------------------|-------------------|--------------------|---------------|
| Prevalence of Illegal Internet Pharmacies                    |                      |                   |                    |               |
| Availability of Illegal Internet Pharmacies to Patients       |                      |                   |                    |               |
| Ability to Determine the Legitimacy of an Internet Pharmacy  |                      |                   |                    |               |
| Types of Medications Sold by Illegal Internet Pharmacies     |                      |                   |                    |               |
| Risks Associated with Medications Sold by Illegal Internet Pharmacies |              |                   |                    |               |
13. Please indicate how confident you are in your ability to educate patients and caregivers on each of the following topics in your current practice setting:

| Topic                                                                 | Not at all Confident | Not Too Confident | Somewhat Confident | Very Confident |
|-----------------------------------------------------------------------|----------------------|-------------------|--------------------|---------------|
| Prevalence of Illegal Internet Pharmacies                            | 0                    | 0                 | 0                  | 0             |
| Availability of Illegal Internet Pharmacies to Patients               | 0                    | 0                 | 0                  | 0             |
| Ability to Determine the Legitimacy of an Internet Pharmacy           | 0                    | 0                 | 0                  | 0             |
| Types of Medications Sold by Illegal Internet Pharmacies              | 0                    | 0                 | 0                  | 0             |
| Risks Associated with Medications Sold by Illegal Internet Pharmacies | 0                    | 0                 | 0                  | 0             |

14. How important is patient access to legitimate internet pharmacies?

- Very important
- Somewhat important
- Not too important
- Not at all important

15. How important is the web address (aka domain name) when determining legitimacy of an internet pharmacy?

- Very important
- Somewhat important
- Not too important
- Not at all important

16. For each of the following statements, please indicate the extent to which you agree or disagree:

| Statement                                                                 | Strongly Disagree | Somewhat Disagree | Somewhat Agree | Strongly Agree |
|---------------------------------------------------------------------------|-------------------|-------------------|----------------|---------------|
| Illegal internet pharmacies are easily identifiable                        | 0                 | 0                 | 0              | 0             |
| Legitimate Internet pharmacies must have a bricks-and-mortar facility to  | 0                 | 0                 | 0              | 0             |
| operate consistent with applicable law and regulations.                   |                   |                   |                |               |
17. About what percentage of patients within the United States do you think order prescription drugs and/or over-the-counter medications from an online pharmacy?

- 0-20%
- 21-40%
- 41-60%
- 61-80%
- 81-100%

18. Do you think purchasing prescription medications from an online pharmacy is less expensive or more expensive than what is available from a brick-and-mortar storefront?

- Less expensive online
- More expensive online
- The same price

19. Do you think purchasing prescription medications from a “Canadian” online pharmacy is less expensive or more expensive than what is available from a brick-and-mortar storefront?

- Less expensive online from Canada
- More expensive online from Canada
- The same price
Please note the following webpage for the next 3 questions:

20. Based on the look of this webpage, do you think this internet pharmacy is legal or illegal?

- Legal
- Illegal
- Unable to Determine

21. Based upon the appearance of this website, how likely are you to recommend this website to a patient with access issues (e.g. concerns regarding insurance coverage, cost, geographic location or other factors that may inhibit a patient’s access to a given product)?

- Very likely
- Somewhat likely
- Not too likely
- Not at all likely

22. If, during a consultation, a patient notifies you they are taking a medication from this website, what would you recommend they do? (Please select all that apply)

- Continue taking the product
- Discontinue taking the product
- Consult with their primary care provider
- Unsure

Add notation in script that the image above was posted by an illegal online pharmacy, as determined through legal action by the U.S. Department of Justice. In April 2018, Kristjan Thorkelson and several other operators including Canada Drugs admitted to the illegal sale of misbranded and counterfeit prescription drugs in the United States. As part of the plea, Thorkelson and Canada Drugs were ordered to cease the illegal operations and forfeit all domain names and websites operated by these individuals.
23. Based on the look of this webpage, do you think this internet pharmacy website is legal or illegal?
   - Legal
   - Illegal
   - Unable to Determine

24. Based upon the appearance of this website, how likely are you to recommend this website to a patient with access issues?
   - Very likely
   - Somewhat likely
   - Not too likely
   - Not at all likely

25. If, during a consultation, a patient notifies you they are taking a medication from this website, what would you recommend they do?
   - Continue taking the product
   - Discontinue taking the product
   - Consult with their primary care provider
   - Unsure

Add notation in script that the image just shown was to an online pharmacy website determined “a safe site” by the National Association of Boards of Pharmacy through the .Pharmacy Website Verification Program.
26. Based on the look of this webpage, do you think this internet pharmacy is legal or illegal?

- Legal
- Illegal
- Unable to Determine

27. Based upon the appearance of this website, how likely are you to recommend this website to a patient with access issues?

- Very likely
- Somewhat likely
- Not too likely
- Not at all likely

28. If, during a consultation, a patient notifies you they are taking a medication from this website, what would you recommend they do?

- Continue taking the product
- Discontinue taking the product
- Consult with their primary care provider
- Unsure

Add notation in script that the image just shown was a “Not Recommended Site” as determined by the National Association of Boards of Pharmacy.

Resources

29. How familiar are you with resources available to consumers to help identify legitimate, safe online pharmacies?

- Very familiar
- Somewhat familiar
- Not too familiar
30. Are you familiar with the National Association of Boards of Pharmacy (NABP) “.Pharmacy” initiative or other such resources available to patients and healthcare providers to ensure identification of safe, legitimate online pharmacies?

- Not at all familiar
- Very familiar
- Somewhat familiar
- Not too familiar
- Not at all familiar

28A. [IF VERY/SOMEWHAT FAMILIAR] Please explain what you know about these resources.

31. Please provide any additional comments.

**Demographics**

32. What type of pharmacy degree do you possess? Please check all that apply.

- □ B.S.
- □ M.S.
- □ Pharm.D.
- □ Ph.D.
- □ Other (specify):

33. What post-graduate training have you completed or are currently working toward? Please select all that apply.

- □ Residency – PGY1
- □ Residency – PGY2
- □ Fellowship
- □ M.S.
- □ PhD.
- □ MBA
- □ Not applicable.
- □ Other (specify):

34. In what year did you receive your entry-level pharmacy degree?

- 1987 or before
- 1988 to 1997
- 1998 to 2007
- 2008 to 2012
- 2013 to 2018

35. In what region is your primary pharmacy practice? [ADD DROPBOX BOX – STATES]

36. Which of the following best describes your primary practice setting? (Please select only one.)

- Chain pharmacy (4+ units)
- Supermarket pharmacy
- Mass-merchant pharmacy
• Independent pharmacy (1–3 units)
• Hospital/Institutional (inpatient) pharmacy
• Clinic (outpatient) pharmacy
• Consultant pharmacy
• Mail-service pharmacy
• Managed care pharmacy
• Nuclear pharmacy
• Long-term care pharmacy
• Pharmaceutical industry
• Physician office-based practice
• Specialty pharmacy
• Academia (College or school of pharmacy)
• Ambulatory care clinic
• Association/Regulatory
• Federal/Military/Department of Defense pharmacy
• Residency/Fellowship/Postgraduate training
• Currently not working
• Other (specify) __________

37. What is your gender?

○ Male

○ Female

○ Prefer not to answer

38. Please provide your contact information below to enter the drawing to receive a $100 Visa gift card! The winner will be randomly chosen and notified in [June]. Thank you again!

• Name:
• Address:
• City, State and Zip Code:
• Daytime Phone:
• E-mail: