



What All Community Pharmacists Should Know About Veterinary Pharmacy and the Impact of an Educational Intervention

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SCHOOL OF PHARMACY

BACKGROUND

Many pharmacists and veterinarians remain unaware of the benefits pharmacists can provide for veterinarians, animal patients, and caregivers due to lack of education

- In a 2020 survey, 85% of pharmacists and 83% of veterinarians agreed it is important that pharmacists have adequate veterinary medicine knowledge ¹

PURPOSE

To provide education to community pharmacists and pharmacy students on common veterinary pharmacy practices and their role in an effort to bridge the educational gap between pharmacists and veterinarians.

METHODS

Study Design

- Cross-sectional study conducted through a pre- and post-survey completed by participants before and after a one-hour educational session

Study Population

- Community pharmacist or pharmacy student

Study Measures: Dependent Variables

- Primary Outcome: Change in pharmacist and pharmacy student knowledge and comfortability in veterinary collaboration
- Secondary Outcome: Change in pharmacist's knowledge and comfortability in veterinary collaboration

Study Measures: Independent Variables

- Baseline characteristics

RESULTS

Baseline Characteristics (n=13)

- 5 students; 8 pharmacists
- Practicing in MO, KS, TN, GA, IL, MS, NY
- Level of prior veterinary pharmacy knowledge
 - None: 1
 - Very Little: 5
 - Adequate Amount: 4
 - Sufficient Amount: 2
- Prior veterinarian collaboration: 8
 - Medication information and general assistance: 4
 - Compounding: 2
 - Veterinarian hospital duties: 1
 - Number of animal prescriptions/day
 - 0: 7
 - 5-10: 2
 - 10+: 4

| Pre-Survey Results (n=12) | | | | |
|--|---------------------|--------------------|------------------|---------------------------|
| My practice can provide beneficial support to veterinarians. | | | | |
| Strongly Disagree 0 | Disagree 1 (8%) | Neutral 4 (33%) | Agree 4 (33%) | Strongly Agree 3 (25%) |
| I am aware of the services pharmacists can provide for veterinarians and pet owners. | | | | |
| Strongly Disagree 0 | Disagree 2 (17%) | Neutral 1 (8%) | Agree 6 (50%) | Strongly Agree 3 (25%) |
| My practice has the appropriate training programs and resources to compound pet medications. | | | | |
| Strongly Disagree 2 (17%) | Disagree 3 (25%) | Neutral 4 (33%) | Agree 1 (8%) | Strongly Agree 2 (17%) |
| I am comfortable providing clients and veterinarians with resources regarding animal medications. | | | | |
| Strongly Disagree 2 (17%) | Disagree 0 | Neutral 5 (42%) | Agree 2 (17%) | Strongly Agree 3 (25%) |
| I am comfortable collaborating with a veterinarian to reach patient centered goals. | | | | |
| Strongly Disagree 0 | Disagree 1 (8%) | Neutral 3 (25%) | Agree 5 (42%) | Strongly Agree 3 (25%) |
| I am familiar with the laws and regulations regarding animal medicine pertaining to the pharmacist's scope of practice. | | | | |
| Strongly Disagree 1 (8%) | Disagree 3 (25%) | Neutral 4 (33%) | Agree 1 (8%) | Strongly Agree 3 (25%) |

| Post-Survey Results (n=12) | | | | |
|--|---------------------|--------------------|------------------|---------------------------|
| My practice can provide beneficial support to veterinarians. | | | | |
| Strongly Disagree 0 | Disagree 1 (8%) | Neutral 2 (17%) | Agree 3 (25%) | Strongly Agree 6 (50%) |
| I am aware of the services pharmacists can provide for veterinarians and pet owners. | | | | |
| Strongly Disagree 0 | Disagree 0 | Neutral 0 | Agree 4 (33%) | Strongly Agree 8 (67%) |
| My practice has the appropriate training programs and resources to compound pet medications. | | | | |
| Strongly Disagree 1 (8%) | Disagree 2 (17%) | Neutral 3 (25%) | Agree 4 (33%) | Strongly Agree 2 (17%) |
| I am comfortable providing clients and veterinarians with resources regarding animal medications. | | | | |
| Strongly Disagree 0 | Disagree 0 | Neutral 1 (8%) | Agree 6 (50%) | Strongly Agree 5 (42%) |
| I am comfortable collaborating with a veterinarian to reach patient centered goals. | | | | |
| Strongly Disagree 0 | Disagree 0 | Neutral 1 (8%) | Agree 7 (67%) | Strongly Agree 4 (33%) |
| I am familiar with the laws and regulations regarding animal medicine pertaining to the pharmacist's scope of practice. | | | | |
| Strongly Disagree 0 | Disagree 0 | Neutral 1 (8%) | Agree 8 (67%) | Strongly Agree 3 (25%) |

Following the conclusion of the educational intervention, there was an increased number of participants who felt they could provide beneficial support to veterinarians, who were more familiar with veterinary pharmacy services and animal medicine laws and regulations, were more comfortable with animal medication resources and collaborating with a veterinarian. 83% of participants also wanted to learn more about veterinary pharmacy

LIMITATIONS

- Small sample size
- Single one-hour session
- Limited to information determined to be most important by presenters
- Some participants already had adequate knowledge of veterinary pharmacy services

CONCLUSIONS

- An educational intervention increased knowledge and comfortability of a community pharmacist and pharmacy student in their role in veterinary medicine
- Community pharmacists and pharmacy students want to learn about veterinary pharmacy
- More studies need to be done to assess the benefits of veterinarian and pharmacist collaboration to support the need for veterinary medicine education within pharmacy programs

REFERENCES

1. Fredrickson, M. E., Terlizzi, H., Horne, R. L., & Dannemiller, S. (2020). The role of the community pharmacist in veterinary patient care: a cross-sectional study of pharmacist and veterinarian viewpoints. *Pharmacy practice*, 18(3), 1928. <https://doi.org/10.18549/PharmPract.2020.3.1928>