Improving Medication Adherence through Collaboration between Colleges of Pharmacy and Community Pharmacies

Megan Willson, PharmD, BCPS; Catrina Schwartz, PharmD, BS; Jennifer Robinson, PharmD
Spokane, WA

Objectives
1) Create a reproducible model paring student pharmacist with community pharmacist mentors to improve medication adherence through personalized phone calls.
2) Improve medication adherence to cholesterol medications

Methods
Design
• Prospective randomized trial comparing pharmacy standard of care to student pharmacist – lead telephone coaching and disease state management.

Study endpoints
• Cholesterol medication adherence pre study and during study
• Total cholesterol pre study and post study
• Impact of student learning and confidence

Results
• Forty-two patients were initially consented for inclusion into the study. One participant withdrew consent, 5 participants were not able to be reached for initial cholesterol testing and 1 participant was unable to complete final cholesterol testing. Forty-one participants were included in medication adherence data.
• Fifty-one percent of the sample was assigned to the no phone call group.
• Forty-nine percent were male and 92% of the sample was white.
• Baseline characteristics were similar with regards to history of stroke, diabetes, hypertension and myocardial infarction.
• No difference was found between the no phone call group and the phone call group for change of total cholesterol (p=0.383) or medication adherence (p=0.694) as measured by the medication possession ratio during the course of the study.
• Student pharmacist had increased levels of confidence in their ability to communicate with patients and with the use of motivational interviewing. No changes were seen in the number of identified barriers to medication adherence.

Conclusion
Telephone coaching further strengthened students’ confidence in their counseling abilities providing a potential opportunity for expanded introductory pharmacy practice experience. While no significant differences were found in total cholesterol levels or medication adherence, we have identified a potential model in which to identify patients in need of additional assistance. These identified patients could be referred to a telephone coaching program to discuss various topics from medication adherence to disease state management. The use of student pharmacists allows for further interactions with the patients outside the time spent visiting the pharmacy. Further testing of this model in other disease states or in patients who have recently began cholesterol medications may demonstrate other potential benefits.