Incorporation of a health literacy exercise into first year pharmacy students’ IPPEs

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BACKGROUND

Health Literacy (HL) in U.S.
• Average reading level is 8th grade while health information is written for the 12th grade level4

ACPE Standards
• Admission criteria for college/school of pharmacy includes communication skills3
• Impression placed on verbal and nonverbal communication to best care for the patient4
• Professional communication should result in patient specific education, advocacy, and/or interprofessional collaboration goals3

HL in Introductory Pharmacy Practice Experiences (IPPEs)
• After 20 hour HL module, students completing IPPE in community pharmacy completed survey identifying HL changes to make and then presented HL suggestions to practice site. Sixty-one percent of pharmacists reported making at least one change to better identify/serve or low HL patients8
• First-year student pharmacists completed a service-learning IPPE and were found to have an 80% improvement in HL knowledge2

OBJECTIVE

To assess the impact of using the AHRQ Health Literacy Assessment Tool at their IPPE on students’ confidence in applying HL skills and on their understanding, perceptions, and application of health literacy compared to students who have not utilized the tool.

METHODS

IPPEs
• 10-25 hour visits (50 hours total) over the course of one semester
• Community practice site (independent or chain)

HL Questionnaire
• 29 items, 7-point Likert scale
• Assessed students’ understanding of HL
• Perceptions
• Understanding
• Application

HL Assessment Questions
• Modified from AHRQ HL Assessment Tool6
• “Comprehensive guide to help pharmacists assess how well they are set up to serve patients with limited health literacy” (HL user’s guide)
• Accessibly in the pharmacy to patients with limited literacy was assessed
• Promotion of services
• Print materials
• Clear verbal communication

Data Analysis
• IPPE N=25 (Amherst, NY) used to perform data analysis
• Demographics analyzed with descriptive frequencies
• Friedman’s ANOVA determined statistically significant difference between pre, mid, and post point values of collective cohorts
• Statistical analysis was performed using SPSS (student’s marked level of agreement)

RESULTS

Comparisons of Control (Cohort 2019) vs. Intervention (Cohorts 2020 and 2021) (Kruskal-Wallis)

<table>
<thead>
<tr>
<th>HL Measurement</th>
<th>Student’s marked level of agreement</th>
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<tbody>
<tr>
<td>Pre p-value</td>
<td>0.084</td>
</tr>
<tr>
<td>Mid p-value</td>
<td>0.029</td>
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<tr>
<td>Post p-value</td>
<td>0.641</td>
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DISCUSSION AND IMPLICATIONS

Discussion
• All cohorts (control, N=44; intervention, N=49) had overall significant improvements (p<0.001) for the HL assessment
• HL exercise did not significantly impact post-test outcomes between control (2019) and intervention (2020 and 2021) cohorts

Implications
• While incorporating a HL exercise into IPPEs can improve students’ perceptions, understanding, or application of health literacy concepts, as well as their confidence in applying skills, it may be no better than incorporating concepts into the curriculum alone
• Further research should be conducted to continue to improve students’ confidence in applying these skills.

REFERENCES


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