

Background

Medical cannabis has received attention in the United States regarding laws and regulations, community controversies, and its use as a pharmaceutical agent. As more states continue legalizing medical cannabis, there is an increase in patient use. Pharmacists and healthcare providers will continue to see more questions about cannabis regarding safety measures, doses, and drug interactions. Some states have started requiring pharmacist to be a part of the dispensing process. If states are starting to require pharmacists to be a part of dispensing medical cannabis, then states should also require pharmacists to receive medical cannabis education from pharmacy schools.

Objective

To evaluate how student perceptions and knowledge of cannabis differed before and after the completion of the new medical cannabis course of pharmacotherapeutics.

Methods

Study Design

- Likert-style, paper survey containing an identical before and after medical cannabis education section
- Both sections had 5 questions to assess perceptions and 5 questions to gauge knowledge
- Students filled out the respective surveys to show how they felt about medical cannabis

Inclusion Criteria

- SIUE 3rd year pharmacy student
- Attended the medical cannabis lecture
- Fully completed both sections of the survey

Statistical Analysis

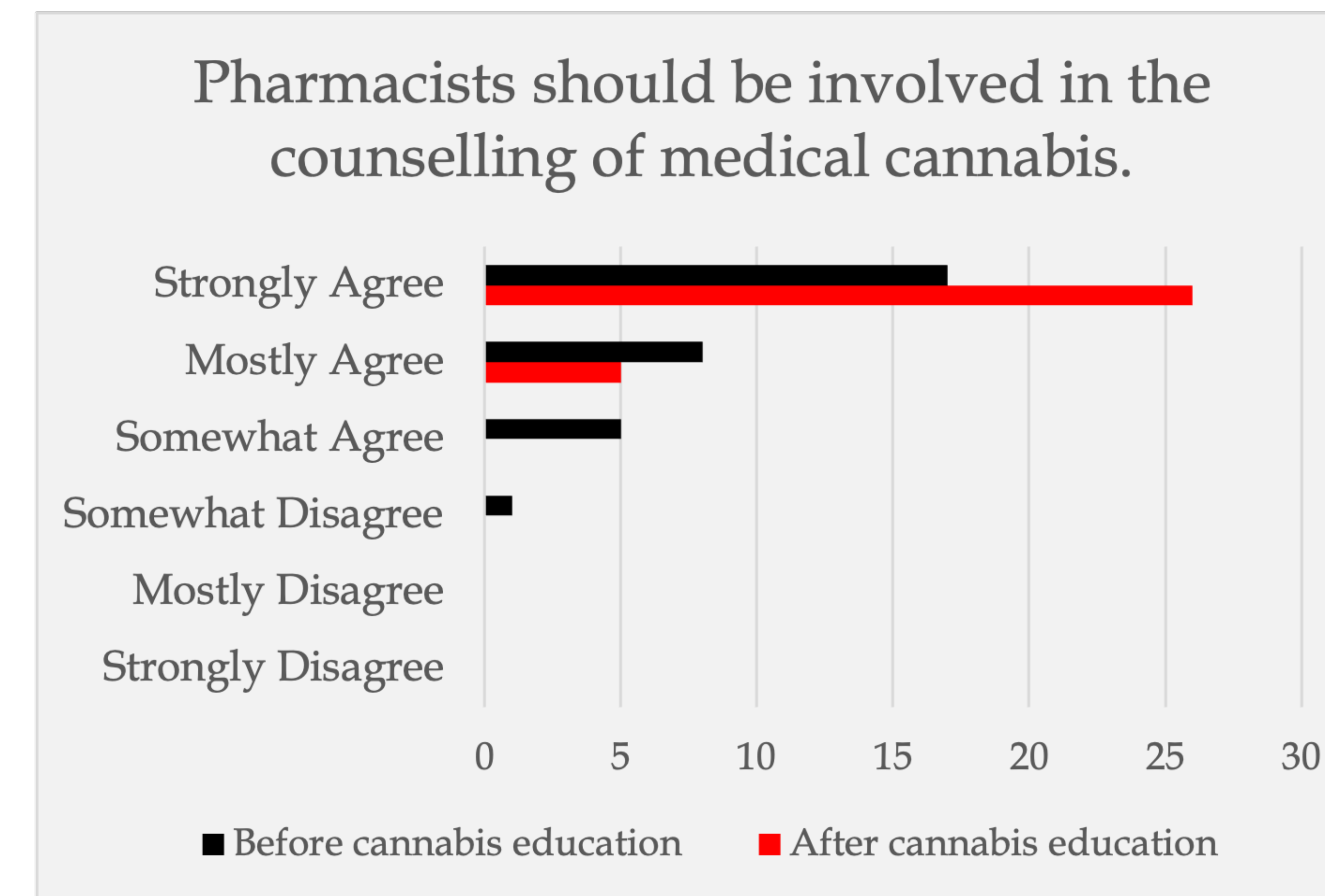
- 6-categorical Likert-type scale
- Responses collapsed to disagree vs agree
- Descriptive analysis was used including frequencies, percentages, means, and medians
- Paired t-tests ran for each question using excel to determine significance

Strongly Disagree	Mostly Disagree	Somewhat Disagree	Somewhat Agree	Mostly Agree	Strongly Agree
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Results

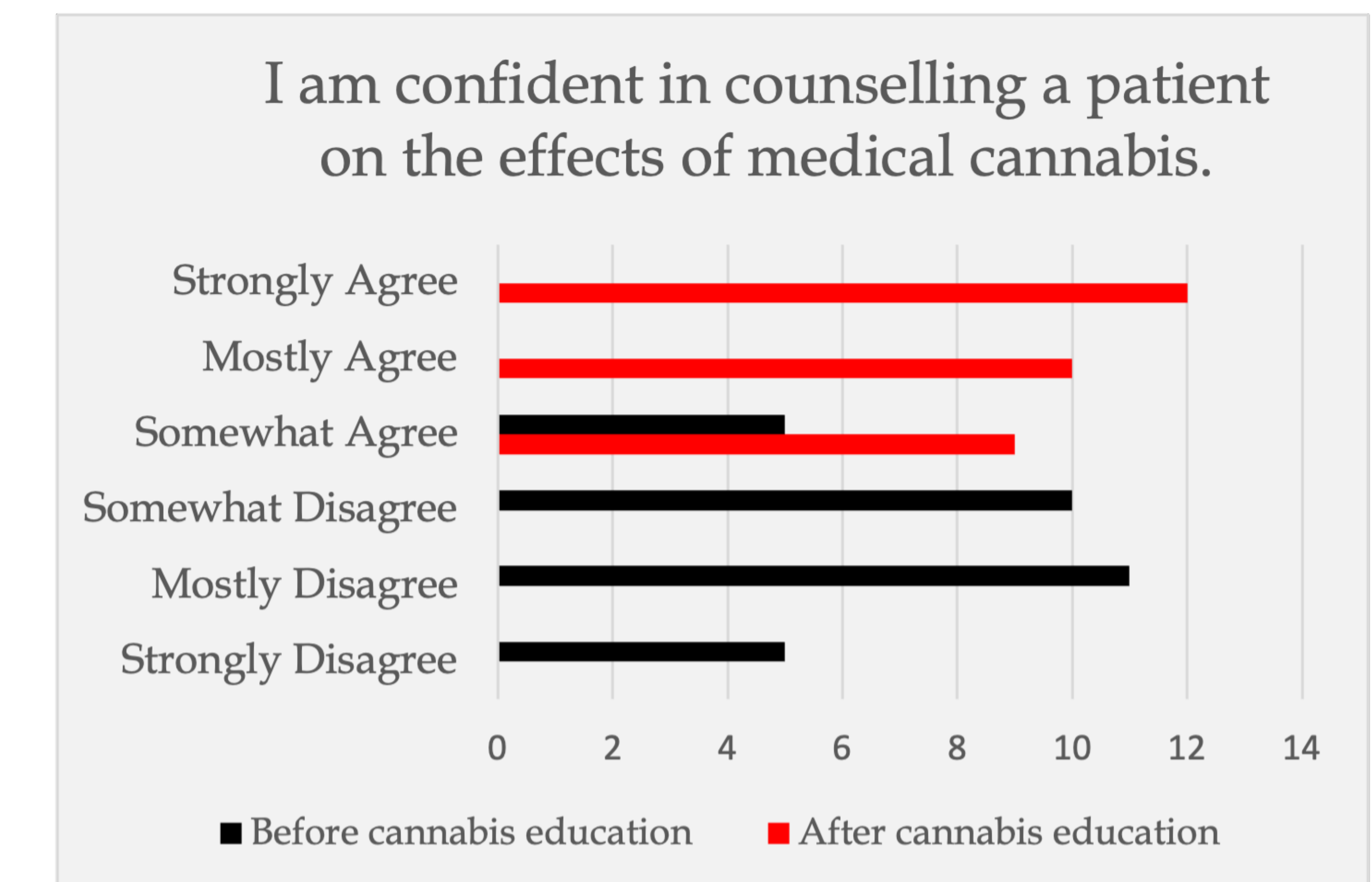
Student Perception Responses

- Pharmacists will implement this material in practice.
 - Before education: 31/31 agreed (100%)
 - After education: 31/31 agreed (100%)
- Pharmacist should be involved in the counselling process.
 - Before education: 30/31 agreed (97%)
 - After education: 31/31 agreed (100%)



Student Knowledge Responses

- I know the laws and regulations surrounding cannabis use.
 - Before education: 13/31 agreed (42%)
 - After education: 31/31 agreed (100%)
- I am confident in counselling a patient on medical cannabis.
 - Before education: 5/31 agreed (16%)
 - After education: 31/31 agreed (100%)



The charts above show the breakdown of responses before (black) and after (red) completion of the course. Both charts show a shift in responses after the course to a better understanding and knowledge of cannabis. All of the statistically significant responses follow this similar pattern.

The chart to the right shows the other statistically significant questions and how the students responded. All of our knowledge based questions showed drastic improvement in the student's confidence and ability to help with patients who have questions about cannabis.

Additional Statistically Significant Questions	Agree Before Course (N)	Agree After Course (N)
Understanding the difference between CBD and THC.	23/31	30/31
Confidence in counselling patients.	5/31	31/31
Believing cannabis is effective disease management.	26/31	31/31

Conclusion

- This research shows the potential gap in education when it comes to medical cannabis and that most students agree that this is information that they will use in their careers, but they are not confident in their knowledge of the drug.
- SIUE wanted to be able to evaluate the impact of their solution of adding medical cannabis education to their program.
- The post education surveys showed tremendous improvement in how the students perceived medical cannabis and their knowledge of its laws, drug-interactions, and effects.
- With this study, we evaluated and compared the SIUE students' perceptions and knowledge of medical cannabis before and after completion of the lecture.
- Our conclusion is that the introduction of the new material had a massive positive effect on the students' education and better prepared them to fulfill their vital healthcare role as pharmacists.