

Impact of an IUD insertion clinic on medical students' knowledge, attitude, and perceived self-efficacy regarding IUDs

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Abstract

INTRODUCTION: Education concerning contraceptive use, especially intrauterine devices (IUDs), is often lacking in middle and high school, and sometimes even up to medical school. Compared to oral contraceptive pills or condoms, IUDs have lower failure rates and higher user satisfaction rates but are still less popular. Furthermore, medical school preclinical curriculum often lacks simulation training regarding IUDs, leaving students underprepared in real-life clinical situations. Medical students' knowledge and attitudes towards IUDs is critical for providing safe and effective methods of birth control to the community. Factors such as age, gender, race, marital status, area of residence and education, experience with IUDs, and preferred medical specialty could play an important role in students' pre-existing knowledge and attitudes towards IUD use and safety. We analyzed the impact of a brief educational session and simulated practice with IUD placement on IUD knowledge, attitudes, comfort level, and common misconceptions among medical students.

METHODS: We developed an IUD insertion educational clinic for first- and second-year medical students, including a 30 minute lecture, followed by 30 minutes of practice inserting IUDs on uterine models. Uterine models and IUDs were provided by an OB-GYN faculty and Medical Students for Choice (MSFC). Participants completed surveys before and after the clinic assessing demographics, IUD knowledge, attitudes, comfort level, and common misconceptions surrounding IUD insertion and usage. We used Chi-Square and McNemar tests of associations to analyze the impact of IUD clinic on students' knowledge and perceptions.

RESULTS: Our survey was completed by 57 medical students before and after the clinic. Majority of the participants were White (71.93%), females (75.44%), unmarried (87.72%), did not have children (100%), lived in urban areas (91.23%), and were from the South region (67.27%). A majority of students or their partners (61.40%) did not have an IUD before. More students from the South region correctly answered about the rate of unintended pregnancies with IUDs ($p=0.041$) than other regions. The IUD clinic significantly improved students' knowledge regarding recommending an IUD to women under 19 years of age ($p=0.024$), and someone with chlamydia ($p=0.014$). Students' attitudes also significantly changed regarding allowing midwives/nurse practitioners to place IUDs ($p=0.0003$). Our clinic significantly improved students' perceived self-efficacy regarding counseling patients about IUD ($p<0.0001$) and placing an IUD under faculty supervision ($p<0.0001$).

CONCLUSION: An IUD insertion clinic had a significant impact on improving medical students' knowledge, attitudes, and self-efficacy regarding IUDs. We found that the students' knowledge regarding IUDs varies by region, which could be

due to different education curricula. IUDs are an important method of safe birth control and primary care physicians, especially osteopathic physicians, are the first point of information for many women. Similar clinics or an inclusion into medical curriculum can significantly improve medical students' current knowledge and future practice regarding IUDs.