

The impact of clinical clerkships on medical students' attitudes toward contraception and abortion: a pilot study

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Abstract

Objective: Investigate the impact of clinical clerkships on medical students' attitudes toward contraception and abortion.

Methods: As part of their required curriculum, second-year medical students at the University of Iowa complete an anonymous survey that presents eight questions involving specific contraception and abortion scenarios. In this pilot study, all 159 members of the Class of 2013 who had previously completed this required anonymous survey were invited to re-take the survey at the conclusion of their fourth year. Additional questions, asking the students if they felt that clinical clerkships had changed their perspectives on contraception and abortion in general, were included.

Results: Of the 159 members of the Class of 2013, 42 volunteered to participate, for a response rate of 26%. Twenty students (47.62%) felt that clinical clerkships had changed their perspectives on contraception and thirteen students (39.95%) felt that clinical clerkships had changed their perspectives on abortion. The percentage of students who felt comfortable referring a patient to a colleague for an abortion increased significantly from 71.33% to 90.48% ($p=0.024$). Responses to the other seven questions included in the survey did not

differ significantly pre and post-clerkships.

Conclusions: This pilot study, although limited by a low response rate, suggests that clinical clerkships have the ability to impact medical students' attitudes toward contraception and abortion in general, as well as toward specific scenarios involving abortion.

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Background

Prior to medical school, students' perspectives on issues of human sexuality are predominantly influenced by religious beliefs, political affiliation, family culture and social exposures. In 1996, the American Medical Association released a council report stating: "The physician's non-judgmental recognition of sexual orientation and behavior enhances his or her ability to render optimal patient care in health as well as

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in illness.”¹ Since then, increasing focus has been placed on medical school education and its ability to impact medical students’ perspectives on issues of human sexuality.

Research has shown that various teaching modalities, including lecture presentations, small group discussions and clinical clerkships, impact medical students’ attitudes toward lesbian, gay, bisexual and transgender (LGBT) issues.²⁻⁴ Similar research, aimed at investigating how these teaching modalities impact medical students’ attitudes toward other human sexuality issues—such as contraception and abortion—is lacking in the literature. A PubMed search identified just one published study regarding how clinical clerkships impact medical students’ attitudes toward abortion. In that study, 38% of medical students who were exposed to abortion care during their OB/GYN clerkship reported a change in their attitudes toward abortion in general.⁵ However, attitudes toward specific contraception and abortion scenarios were not assessed.

The aim of this pilot study was to investigate the impact of clinical clerkships on medical students’ attitudes toward contraception and abortion in general, as well as attitudes toward specific contraception and abortion scenarios.

Methods

All 159 members of the University of Iowa Carver College of Medicine Class of 2013 completed an anonymous survey as part of their required second-year curriculum, prior to clinical clerkships. The survey included the

following eight questions involving specific contraception and abortion scenarios:

1. Would you prescribe oral contraception to a 16 years-old female for management of irregular menstrual bleeding and dysmenorrhea, who is not currently sexually active, but plans to have sex with her boyfriend soon?
2. Would you prescribe the “morning after pill” to a woman who just had intercourse and did not use any contraception?
3. Would you prescribe the “abortion pill” to a woman who is 8 weeks pregnant with a normal pregnancy and is certain that she wants to end the pregnancy?
4. Would you refer a patient, who is 16 weeks pregnant with a normal pregnancy and is certain that she wants to end the pregnancy, to a colleague for an abortion?
5. Would you recommend against abortion for a patient who is 16 weeks pregnant with a normal pregnancy and initially thought that she desired an abortion, but is now ambivalent about continuing versus ending the pregnancy?
6. Would you reveal your personal beliefs about abortion to a patient who is pregnant, considering abortion and requesting that you share your personal beliefs?

7. Do you agree with the statement: "Since abortion is legally protected in our society, medical professionals should always try to maintain a neutral status when counseling patients who did not intend to become pregnant."?
8. Do you think that you are capable of counseling patients with unintended pregnancy in a genuinely neutral manner?

clerkships. In April 2013, an email was sent to the members of the Class of 2013 inviting them to re-take this survey and to answer two additional questions regarding whether or not they felt that clinical clerkships had changed their perspectives on contraception and abortion in general. A reminder email was sent weekly for three weeks. Post-clerkships responses were gathered anonymously using REDCap (Research Electronic Data Capture), a secure web-based application. SAS statistical software was then used to compare pre and post-clerkships responses with two-population proportion tests to yield 1-tailed Z-scores.

Institutional Review Board approval was obtained to re-administer this survey to the members of the Class of 2013 at the end of their fourth-year, following clinical

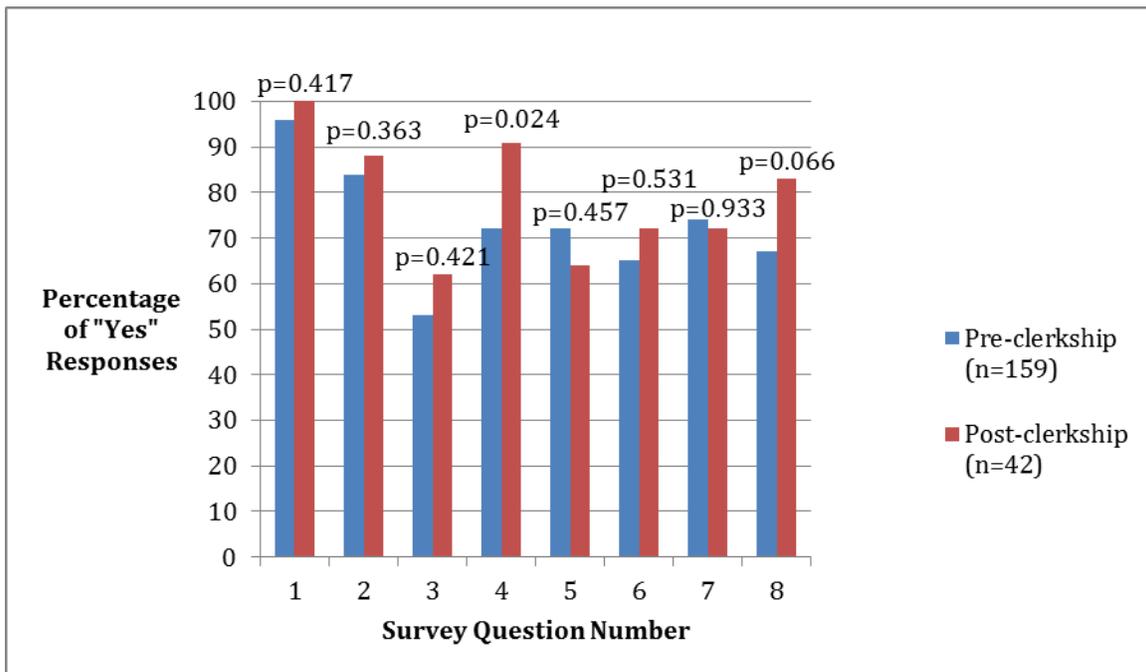


Figure 1: Comparison of attitudes toward contraception and abortion pre and post clinical clerkships

Results

Of the 159 members of the Class of 2013, 42 volunteered to participate in our pilot study, for a response rate of 26%. Twenty students (47.62%) felt that clinical clerkships had changed their perspectives on contraception and thirteen students (39.95%) felt that clinical clerkships had changed their perspectives on abortion.

The percentage of students who felt comfortable referring a patient to a colleague for an abortion increased significantly from 71.33% to 90.48% ($p=0.024$). Responses to the other seven questions included in the survey did not differ significantly pre and post-clerkships. These results are summarized in Figure 1.

Discussion

Many students enter medical school with preconceived attitudes toward controversial issues of human sexuality, such as contraception and abortion. Exposing medical students to patients who desire these interventions is important in helping them to improve their respect and tolerance of patient choices. It is also important in helping them to develop a non-judgmental and evidenced-based approach when interacting with patients who desire these interventions.

The primary weakness of this pilot study was the low response rate and the potentially associated selection bias, as the students who volunteered to participate may or may not have been inherently different than the students who elected not to participate. This low response rate may have also resulted in

inadequate power to detect differences in pre and post-clerkships responses. We plan to continue this study to further investigate the impact of clinical clerkships on medical students' attitudes toward contraception and abortion in a larger sample size, ideally with a higher response rate.

This pilot study suggests that clinical clerkships have the ability to impact medical students' attitudes toward contraception and abortion in general. Perhaps more importantly, our study expanded upon the existing literature by demonstrating that clinical clerkships impact medical students' attitudes towards specific scenarios involving abortion.

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