Undergraduate’s Knowledge of Women’s Reproductive Functioning: Addressing Misinformation in a University Course

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BACKGROUND

Misunderstandings about women’s reproductive functioning and contraceptives abound in the U.S. (for example, see Kaye et al., 2009). The literature on young adults’ understanding of women’s natural reproductive functioning and contraceptives suggests that (mis)education on such matters has a profound impact on health decisions (Edwards et al., 2000; Picardo et al., 2003). From an educational standpoint, it is imperative to understand what (mis)information students bring to the classroom; pedagogically, it is important to know how much wider efforts to address such misunderstandings with presentation of scientific evidence are effective.

Research Questions:
Part 1: a. Where do students obtain information about women’s health and reproductive functioning? How much of this do they trust? b. Do students who obtain information from relatively reputable sources give more accurate responses to questions about normal functioning?

Part 2: a. How deeply entrenched are students’ (mis)understandings? Can common misunderstandings be corrected by exposure to scientifically-based readings, activities, and lectures?

RESULTS

The opportunity to participate in a project to assess undergraduate knowledge about and attitudes towards women’s bodies and lives was presented to the students of “C105: The Biology and Culture of Women’s Bodies” during the first week of the Fall 2013 semester (near the end of August). This course was designed to expose students to the variation in women’s bodies and lives using a biocultural framework (including an emphasis on the evolution of women’s bodies and the cultural environments modern women face). Questionnaires were designed to ascertain where students obtain information about women’s health and reproductive issues, how trustworthy those sources are perceived to be, and to collect knowledge and attitudinal information regarding various aspects of women’s reproductive health in a longitudinal study. 81 students volunteered to complete this questionnaire in August. During the Fall semester, in December, students were again asked to complete a nearly identical questionnaire to assess if/how their knowledge and attitudes were altered by the course. This may be due to lack of variation in reported sources of information (for example, a majority of students reported getting information from the same sources, especially family and friends).

DISCUSSION, LIMITATIONS, AND FUTURE DIRECTIONS

Part 1: Sources of information and trustworthiness:
- Students get their information about women’s health and reproductive issues from a variety of sources (see Figure 1).
- It is interesting to note that in some cases a majority of students say they get information from sources that they themselves perceive as less trustworthy. For example, 84% of students obtain information from family members, though only 50% rate family members as even “usually trustworthy.”
- Future studies should consider not only where individuals obtain information, but also how much those sources actually influence their thinking on various issues (for example, see Kaye et al., 2009) and why individuals rely on less-than-trustworthy sources.

Part 2: Responses in August and Changes in responses from August to December:
- August responses: For many of the statements addressing natural reproductive functioning and/or contraceptives and abortion, many students agreed with popular misconceptions. Interestingly, however, most students did reject or accept some ideas that are/have been perpetuated in popular culture (for example, the idea that women’s bodies can “block” pregnancy in the case of rape).
- Significant shifts were seen in responses to many of the statements (for example, that hormonal contraceptives cause long-term infertility). This is promising for health educators, as this is evidence that exposing students to scientifically-based information in readings, activities, and lectures can address commonly-held misunderstandings.
- Notably, in response to open-ended questions on the December questionnaire, many students remarked that they thought differently about women’s bodies and/or felt “empowered” by having scientific evidence to support their beliefs.
- A potential limitation of these findings is that only 43% of the initial questionnaire respondents re-took the questionnaire in December.
- Those who did not re-take the questionnaire may have had different experiences over the course of the semester. However, given that there were no statistically significant differences in the answers provided on the August questionnaire between those who took the questionnaire once and those who took it twice, it is reasonable to believe that the 35 participants who re-took the questionnaire represent the class as a whole.

MATERIALS AND METHODS

**Part 1:**
- **Where do students obtain information about women’s health and reproductive functioning?**
  - Source of Information and Trustworthiness (Percentage)
  - Sources of information in August and Changes in responses from August to December
  - Responses in August and Changes in responses from August to December

**Part 2:**
- **How deeply entrenched are students’ (mis)understandings?**
  - Are common misunderstandings be corrected by exposure to scientifically-based readings, activities, and lectures?

**WORKS CITED**


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