Sexual Health Knowledge, Education, Activity and Practice (KEAP): A Survey of Undergraduate Medical Students

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Background
- Millions of Americans are living in a state of poor sexual health
- 43% of women and 31% of men suffer from clinical sexual dysfunction at some point in their lives
- Majority of patients want to discuss sexual health with their doctors
- Only half of U.S. medical schools require formal instruction in sexuality
- Medical students perceive these topics to be irrelevant to their future practice
- No current national standard for sexual health curricula
- Lack of representation on board examinations
- Students have very different backgrounds in sexual education, prior knowledge

States Where Sex and HIV Education, If Provided, Don’t Have To Be Medically Accurate

Research Question
How knowledgeable are medical students in the United States on the subject of sexual health and how does this relate to their personal, educational, and clinical experiences?

Project

Sexual Health KEAP Survey: Assessment of Undergraduate Medical Students

- Knowledge
  - 50 questions
  - Seven domains
- Education
  - Exposure prior to medical school
  - Exposure in medical school
- Activity
  - Sexual health history
  - Beliefs
  - Demographics
- Practice
  - Relevancy to future career
  - Understanding of community resources

Domains of Knowledge

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>TOPICS</th>
<th>SAMPLE QUESTION</th>
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</thead>
<tbody>
<tr>
<td>Terminology</td>
<td>Gender identity, gender expression, sexual identity, sexually active behaviors</td>
<td>I know the definition of the term gender identity (Y/N/Unsure)</td>
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<tr>
<td>Sexual Function &amp; Dysfunction</td>
<td>Reproductive anatomy, pharmacotherapy sexual response cycles</td>
<td>The prostate stores sperm prior to ejaculation (T/F/Unsure)</td>
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<tr>
<td>Fertility and Reproduction</td>
<td>Contraception, pregnancy, abortion</td>
<td>IUDs are associated with an increased risk of sterility (T/F/Unsure)</td>
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<tr>
<td>Sexuality Across the Lifespan</td>
<td>Adolescent development, aging, disability, chronic disease</td>
<td>Between the ages of 2 and 6 it is common for children to touch themselves for pleasure (T/F/Unsure)</td>
</tr>
<tr>
<td>Sexual Minority Health</td>
<td>Lesbian, gay, bisexual, and transgender health</td>
<td>Identifying as transgender is a mental health condition (T/F/Unsure)</td>
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<tr>
<td>Society, Culture and Behavior</td>
<td>Sexual fantasy, sexual behaviors, sociocultural myths</td>
<td>Penile enlargement can be safely achieved through surgical intervention (T/F/Unsure)</td>
</tr>
<tr>
<td>Safety and Prevention</td>
<td>STDs, HIV/AIDS, vaccinations, health recommendations, intimate partner violence</td>
<td>Men and women who receive the HPV vaccine will become sexually active earlier than their non-vaccinated peers (T/F/Unsure)</td>
</tr>
</tbody>
</table>

Development of Knowledge Scale
- Phase 1: Initial Survey Development
  - Sexuality Information and Education Council of the United States (SIECUS) guidelines
  - Association of Reproductive Health Professionals (ARHP) guidelines
  - peer reviewed literature
  - focus on common misconceptions, minority health
- Phase 2: Survey Focus Group
  - volunteer students and subject matter experts
  - feedback on questions and design

Methodology
- Electronic dissemination to medical students in all four years across the U.S.
- +/- history of sex education in curriculum
- N=250 (target)
- Focus groups formed by volunteers after survey completion
- topics perceived as most relevant
- efficacy of prior courses in human sexuality
- preferences for various methods of education.

Discussion
- Given the severity of public health inequalities such as the 40% suicide attempt rate within the transgender population or the high frequency of HIV acquisition by young black men, it is pertinent that the next generation of physicians be prepared to address sexual concerns.
- Previous research has focused on student comfort discussing sexuality and self-reported confidence in sexual health knowledge. However these markers are inaccurate reflections of knowledge as trainees frequently overstate their mastery of health topics when surveyed.

The University of Minnesota has a long-standing Program in Human Sexuality that has provided sexual health education for medical students since the 1970s. The results of this research will positively influence future curriculum reform as well as support efforts at the national level towards directing more effective resources for training undergraduate medical students in sexual health.

Acknowledgements
Research supported by the University of Minnesota Department of Family Medicine and Community Health, Program in Human Sexuality in addition to the University of Minnesota Foundation.

References
3. Criniti, S., Crane, B., Woodland, M., Montgomery, O., Hartmann, SU. Perceptions of U.S. Medical Residents Regarding Amount and Usefulness of Sexual Health Instruction in Preparation for Clinical Practice. American Journal of Sexuality Education. 11:161-175.