SAVE THE DATE

WVACEP Emergency Medicine Summit is scheduled for September 15, 2018 at Stonewall Jackson Resort. Sign up at www.wvacep.org.

President’s Message
Debra J. Paulson, MD, FACEP

This year’s ACEP Leadership and Advocacy Conference (LAC) was a wonderful meeting. I was able to attend the Leadership and Advocacy Conference for the first time in March 2017. The 2017 meeting provided a wealth of information, but a late winter storm unexpectedly resulted in a shut down of transportation and the legislature in Washington, DC. The scheduled meetings with the legislators were cancelled. This year the meeting resumed its May meeting time. It was a great opportunity to learn about the issues upon which ACEP is currently addressing/focusing. The local chapters had a day dedicated to issues facing them, such as building membership and leadership, resources, and maintenance of the chapter. Having missed the visit to the “Hill” in 2017, it was truly a great experience to have an opportunity to speak to the legislators this year. Most took
time out of their busy schedule to personally meet with us and listen to the concerns we brought to discuss with them. The legislators were gracious, interested and their assistants took notes for later reference.

Issues discussed with the legislators included drug shortages, the opioid crisis, and disaster preparedness medical response. Two of the opioid bills were sponsored by West Virginia Representative David McKinley and Senator Shelly Moore Capito. The first bill is “The Alternatives to Opioids (ALTO) in the Emergency Department Act” (HR 5197: S 2516). This bill provides grants to help emergency departments and hospitals implement non-opioid, evidence-based pain management. ALTO programs are already in place in New Jersey and Colorado. This bill has passed in the House and has been introduced in the Senate. The second opioid bill, “The Preventing Overdoses While in the Emergency Room (POWER) Act” (HR5176:S2610) provides grants to establish policies and procedures for initiating Medication-Assisted Treatment (MAT) in the emergency department and to provide a “warm handoff” to appropriate community resources and providers to keep patients engaged in treatment. This bill has passed in the House and has been introduced in the Senate.

The issue of drug shortages was addressed with a request to the legislators to sign on to a congressional letter to the FDA Commissioner, Scott Gottlieb. This letter asks that the FDA convene the “Drug Shortage Task Force.” (Membership of this task force can be found on the FDA website). This task force, stakeholders and other relevant agencies are being asked to determine the root causes of the drug shortages and develop recommendations for Congress. This is believed to be a first step to further initiate the conversation regarding the root cause of this problem. WV ACEP co-sponsored a resolution which was passed at the 2017 ACEP Council Meeting to evaluate Group Purchasing Organizations and their “safe harbor” as a cause of these shortages.

The last bill discussed at the LAC was “The MISSION ZERO Act” (HR 880:S 1022). This bill makes military trauma teams available at civilian trauma centers and would allow the teams to maintain their skills in between rotations into conflict areas. This bill has passed in the House and has been introduced and in committee in the Senate.

Dr. Erica Shaver, MD is the incoming President for WV ACEP. She will do a great job. If you see her, please congratulate her and offer her any assistance you might be able to provide to help our chapter to remain strong. Looking forward to seeing all of you and Dr. Shaver at the WV ACEP Summit at Stonewall Jackson Resort this September.

Interested in free CME?
Check out WVACEP's website and click on Education and Resources.

Emergency Medicine Opportunities

The Department of Emergency Medicine at WVU maintains a thriving clinical practice — including J.W. Ruby Memorial Hospital (545-bed, Level I trauma and tertiary-care referral center), United Hospital Center, St. Joseph's Hospital, two WVU Urgent Care centers, WVU Student Health, WVU International Travel Clinic, and an internal locum tenens practice.

BUILD YOUR LEGACY AS YOU SERVE, TEACH, LEARN, AND MAKE A DIFFERENCE FROM DAY ONE.

ACADEMIC OPENINGS:
- J.W. Ruby Memorial Hospital
  Morgantown, WV
- United Hospital Center
  Bridgeport, WV
- St. Joseph's Hospital
  Buckhannon, WV

NON-ACADEMIC OPENINGS:
- Grant Memorial Hospital
  Petersburg, WV
- Davis Medical Center
  Elkins, WV
- Potomac Valley Hospital
  Keyser, WV
- Reynolds Memorial Hospital
  Glen Dale, WV
- Cameron Clark Medical Center
  Parkersburg, WV
  $50,000 signing bonus
- Acute Resources Group
  (Internal Locums Program)

ACCEPTING APPLICATIONS:

wvumedicine.org/careers
or email resume/CV to
angel.greathouse@wvumedicine.org
Visit our website at
medicine.hsc.wvu.edu/em

WVU Medicine | University Health Associates
We are an EOE. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of disability, veteran status or other protected status.
Gender Differences in Sexual Health Knowledge Among Emerging Adults in Acute Care Settings
ABSTRACT

Objectives: "Emerging Adults" are increasingly seeking evaluation in acute care clinics for sexual health related concerns to receive treatment and education. The purpose of this study was to assess the sexual health knowledge of emerging adult patients at acute care health centers, specifically by gender. Methods: We distributed a prospective, self-administered survey from August 2014 through May 2016 to patients ages 18-24 years who presented to one of our four acute-care locations in a university town in a mid-Atlantic state. Analyses included descriptive statistics, as well as Chi Square and Fisher’s exact test cross tabulations to determine differences between genders. Results: From August 2014 through May 2016, a total of 388 patients ages 18-24 years completed a survey at one of three clinical locations, with 81% of the sample identifying themselves as students, and 64% identifying as female. Females were more likely than males to state that they seek health advice at an urgent care or walk-in clinic (70.3% vs. 52.1%, p <0.05). HPV knowledge among women was significantly higher than men (p<0.0001). Open-ended responses were widespread and incorrect in nature, specifically in regards to the human papillomavirus vaccine and routine STI testing. Conclusions: Our study found that females are more knowledgeable about sexual health than their male counterparts. However, both genders were not as knowledgeable overall on sexual health topics as hypothesized. A stronger emphasis on gender-specific programming for sexual health education throughout adolescence, supplemented with increased support for routine preventive health visits during the emerging adulthood time period is encouraged.

Key Words: sexual health; gender; primary care

INTRODUCTION

For younger individuals, sexual health education can have a significant impact on their healthcare-seeking behaviors. The period of life known as “emerging adulthood” — defined as the time between 18 and 25 years of age — is a transitional phase of development when young people typically move from being under the care and guidance of their parents to college or employment.¹ For many individuals, emerging adulthood is a time when they begin to take responsibility for their own health; however, this stage also coincides with a peak in risk behaviors.² These behaviors include unprotected sex, engaging in substance use, and risky driving behaviors, such as driving at high speeds, or driving while intoxicated.³⁻⁵ Approximately 41% of young adults ages 10-24 years of age report having sexual intercourse.⁶ Although the CDC estimates that those ages 15-24 years make up just over one-quarter of the sexually active population, only 50% report being tested for sexually transmitted infections (STIs), but account for half of the 20 million new STIs that occur in the United States each year.⁷ The rate of STIs in the United States has increased exponentially over the past three years. Reported cases of chlamydia, gonorrhea, and primary and secondary syphilis increased for both sexes in the adolescent (15–19 years) and young adult (20–24 years) age groups during 2012–
2016. Alarming ly, the latest data showed the highest rates of infection ever recorded.

Emerging adults are considered an at-risk population that have historically had the least healthcare utilization, and prior to implementation of the Affordable Care Act (ACA) in 2010, was the age group with the least healthcare insurance coverage. Because emerging adults tend to have less chronic health conditions than older populations, they may be more likely to receive care at acute clinics when utilizing healthcare services, and may not be established with a primary care physician until later in life. Prior literature has demonstrated that a greater proportion of ambulatory care for young adults was delivered in emergency departments, care was delivered to males, and an even smaller proportion was covered by private health insurance. From 2010-2014, a 2.5-fold increase was estimated for visits to urgent cares, with a significant increase in STI testing and diagnoses. This may result in walk-in and urgent care clinicians shouldering the burden of preventive health education, coupled with the provision of acute care for presenting illnesses or injuries during short office visits. Also problematic, there are no clear preventive care guidelines for those over age 21, except for the American Congress of Obstetricians and Gynecologists (ACOG) Guidelines for young women. Without clear guidelines for patients and clinicians to follow for emerging adults, they become a population with multiple missed opportunities for care.

Unfortunately, it is common for emerging adults to wait to seek care only upon developing symptoms; men are even more likely to do so. Lack of contact within an established healthcare system may limit emerging adults’ knowledge of sexual health recommendations and access to preventive care and sexual health screenings, including STI testing and immunizations, that are recommended into adulthood. Knowledge of emerging adults seeking acute care surround sexual health topics can shed light on knowledge deficits and needs of this high-risk population.

Additional disparities in healthcare seeking behaviors of emerging adults, especially for sexual and reproductive health issues, may exist among genders. Prior literature has shown that females seek preventive medical care more often than males. Emerging adult males are more likely than females to report no contact with a healthcare professional, and lack an established source of care. However, there is a deficiency of evidence as to whether or not this necessarily supports a stronger correlation between medical knowledge and better health outcomes.

Therefore, the purpose of this study was to assess sexual health knowledge of emerging adult patients at acute care health centers by gender. If differences in sexual health knowledge and practices exist across these groups, this may necessitate additional education for young adults, especially during their walk-in acute visits. This has the potential to combine preventative medicine with tertiary care, leading to improved patient outcomes in emerging adults’ future overall health, in addition to their sexual and reproductive health.
METHODS

Study Design
We distributed a self-administered survey from August 2014 to May 2016 to patients ages 18-24 years who presented to one of our four academic clinical locations in a university town in a mid-Atlantic state: an affiliated hospital emergency department (ED), two urgent care walk-in clinic sites, and a student health services clinic. This study was reviewed and approved by our university’s Institutional Review Board (#1409420843), and written informed consent was obtained from each patient prior to completion of their survey.

Student research assistants enrolled in a university-based academic course available to both undergraduate- and graduate-level students distributed surveys at all four locations. Research assistants were responsible for collecting data in 3-hour shifts at the locations, and worked closely with nursing staff and providers to identify eligible patients for the study.

Patients were approached by research assistants in the privacy of their exam rooms prior to provider evaluation and treatment, while waiting for test results or prior to subsequent discharge. Although the majority of patients were considered walk-in appointments, some patients were approached who were waiting for scheduled primary care or gynecological visits at the student health services clinic. Upon completion, patients were asked to place the survey in a sealed envelope before being collected by the research assistants in order to maintain the confidentiality of their responses.

Measurement
Our survey was composed of questions related to sexual health knowledge and sexual health behaviors. For the purposes of this study, we focused solely on the knowledge-related questions and their supplemental open-ended questions. Initial demographic questions on the survey asked participants to report their date of birth, sex, race, current marital status, highest level of education completed, current employment status, annual household income, and location typically sought for medical advice.

Questions regarding sexual health knowledge were adapted from various sources; we utilized the University of Florida’s “GatorWell” health promotion survey, a publicly available college health survey, as well as the American College Health Association (ACHA)’s annual survey. Sexual health knowledge questions were in the form of statements with “Yes/No” response choices on topics related to STIs, HIV transmission, condom usage, birth control, and contraception. We also developed open-ended questions to supplement these questions, and asked participants to report their knowledge on what a Papanicolau (pap) smear tests, what human papillomavirus vaccine prevents, how often men and women should do self-exams, and what STIs are tested for during a routine exam.

Data Analysis
Descriptive statistics were calculated for all variables relating to demographics and “Yes/No”
sexual health knowledge questions. The Fisher’s Exact test was administered to test the association between categorical variables by gender; when the expected sample sizes were large enough, the Chi Square test was utilized. Differences were considered to be statistically significant at $p<0.05$. All analyses were conducted using SUDAAN (SAS) software.

Responses to open-ended questions were analyzed using conventional content analysis wherein text responses were coded and then grouped into categories and eventually into emergent themes for each question.

RESULTS

Demographics

From August 2014 through May 2016, a total of 546 patients ages 18-24 years were approached by student research assistants at one of the four locations, 420 of which agreed to participate (77%). After cleaning the data of surveys less than 50% completed, the final number of participants included in our analyses was 388 (92%). The majority of surveys were completed at one of the ambulatory clinics (87%), as compared to the ED. Approximately 81% of the sample identified themselves as students. Most participants identified themselves as White/Non-Hispanic (90.4%; Table 1). The survey provided an option to self-report other gender identification; however, no participants in our study identified themselves as other than male or female.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Number</strong></td>
<td>142 (36.6)</td>
<td>246 (63.4)</td>
</tr>
<tr>
<td><strong>Average Age, years</strong></td>
<td>20.6</td>
<td>20.1</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>124 (87.3)</td>
<td>227 (92.3)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>8 (5.6)</td>
<td>11 (4.5)</td>
</tr>
<tr>
<td>Asian</td>
<td>4 (2.8)</td>
<td>5 (2.0)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (2.1)</td>
<td>2 (0.8)</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>3 (2.1)</td>
<td>1 (0.4)</td>
</tr>
<tr>
<td><strong>Current Relationship Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in a relationship</td>
<td>87 (61.3)</td>
<td>114 (46.7)</td>
</tr>
<tr>
<td>In a relationship, not living together</td>
<td>42 (29.6)</td>
<td>90 (36.9)</td>
</tr>
<tr>
<td>In a relationship, living together</td>
<td>12 (8.5)</td>
<td>40 (16.4)</td>
</tr>
<tr>
<td><strong>Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Education</td>
<td>34 (23.9)</td>
<td>62 (25.5)</td>
</tr>
<tr>
<td>College Education</td>
<td>108 (76.1)</td>
<td>184 (74.8)</td>
</tr>
<tr>
<td><strong>Current Employment Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed for wages</td>
<td>35 (24.7)</td>
<td>80 (32.5)</td>
</tr>
<tr>
<td>Self-employed</td>
<td>3 (2.1)</td>
<td>1 (0.4)</td>
</tr>
<tr>
<td>Student</td>
<td>112 (78.9)</td>
<td>204 (82.9)</td>
</tr>
<tr>
<td>Out of work</td>
<td>8 (5.6)</td>
<td>8 (3.3)</td>
</tr>
<tr>
<td>Homemaker</td>
<td>0 (0.0)</td>
<td>3 (1.2)</td>
</tr>
<tr>
<td>Unable to work</td>
<td>1 (0.7)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td><strong>Location Sought for Health Advice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walk-in, urgent care, or acute care clinic</td>
<td>74 (52.1)</td>
<td>173 (70.3)</td>
</tr>
<tr>
<td>Doctor's office</td>
<td>72 (50.7)</td>
<td>121 (49.2)</td>
</tr>
<tr>
<td>Hospital emergency room</td>
<td>16 (11.3)</td>
<td>27 (11.0)</td>
</tr>
<tr>
<td>Hospital outpatient department</td>
<td>3 (2.1)</td>
<td>5 (2.0)</td>
</tr>
<tr>
<td>Military or VA health care facility</td>
<td>1 (0.7)</td>
<td>3 (1.2)</td>
</tr>
<tr>
<td>Other</td>
<td>5 (3.5)</td>
<td>10 (4.1)</td>
</tr>
</tbody>
</table>
Gender Differences
Approximately 64% of the sample completing the survey was female. Proportionately more females reported seeking advice at an urgent care or walk-in clinic as compared to males (70.3% vs. 52.1%); however, about half of participants representing either gender (49.1% vs. 50.7%) stated they would additionally seek advice from a doctor’s office (Table 1).

Overall, females were more likely to answer questions about sexual health knowledge accurately compared with their male counterparts. Table 2 presents survey questions that resulted in statistically significant differences between male and female patients’ accurate knowledge of sexual health. HPV knowledge among women was significantly higher than men (p<0.0001).

Table 2. Percentage of participants answering sexual health knowledge survey questions correctly stratified by gender.

<table>
<thead>
<tr>
<th>Question (Answer)</th>
<th>Male %</th>
<th>Female %</th>
<th>P-Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is medically riskier for women who smoke heavily to use a hormonal birth control method. (Yes)</td>
<td>79.4</td>
<td>89.0</td>
<td>p=0.0099</td>
</tr>
<tr>
<td>When used correctly, birth control pills prevent STI transmission. (No)</td>
<td>91.6</td>
<td>96.8</td>
<td>p=0.0259</td>
</tr>
<tr>
<td>Human Papilloma Virus (HPV) is considered to be a primary cause of cervical cancer in women. (Yes)</td>
<td>74.5</td>
<td>93.0</td>
<td>p&lt;0.0001</td>
</tr>
<tr>
<td>A vaccine exists that helps prevent HPV in humans. (Yes)</td>
<td>70.2</td>
<td>88.9</td>
<td>p&lt;0.0001</td>
</tr>
<tr>
<td>Chlamydia is the most common STI among 18-25 year olds. (Yes)</td>
<td>78.9</td>
<td>88.2</td>
<td>p=0.0144</td>
</tr>
<tr>
<td>A woman can get pregnant while she’s menstruating. (Yes)</td>
<td>58.2</td>
<td>84.0</td>
<td>p&lt;0.0001</td>
</tr>
</tbody>
</table>

Boldface indicates statistical significance (p<0.05). *Mantel-Haenszel Chi-Squared Test

Table 3 displays the open-ended survey questions and categorized participant responses that were written in. A substantial proportion (43%) of males wrote in that they did not know what a pap smear tests. There was a wide distribution of answers from both genders regarding what STIs are tested for during a routine test: 51.6% of females responded that this test included Chlamydia, in comparison to 38.0% of males. Chlamydia was the most frequently reported STI for this question (Table 3). About 16% of the male sample wrote in “Don’t Know” to this question, compared to about 10% of females.
<table>
<thead>
<tr>
<th>Open-Ended Questions &amp; Subsequent Response Categories</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Number</strong></td>
<td>142 (36.6)</td>
<td>246 (63.4)</td>
</tr>
<tr>
<td><strong>What does a pap smear test for?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cervical cancer</td>
<td>15 (10.6)</td>
<td>56 (22.8)</td>
</tr>
<tr>
<td>STI</td>
<td>9 (6.3)</td>
<td>59 (24.0)</td>
</tr>
<tr>
<td>Cancer (other)</td>
<td>5 (3.5)</td>
<td>31 (12.6)</td>
</tr>
<tr>
<td>Abnormalities/ Irregularities</td>
<td>2 (1.4)</td>
<td>30 (12.2)</td>
</tr>
<tr>
<td>HPV</td>
<td>7 (4.9)</td>
<td>20 (8.1)</td>
</tr>
<tr>
<td>Bacteria/Infection</td>
<td>1 (0.7)</td>
<td>13 (5.3)</td>
</tr>
<tr>
<td>General health</td>
<td>3 (2.1)</td>
<td>11 (4.5)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>61 (43.0)</td>
<td>21 (8.5)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (4.2)</td>
<td>11 (4.5)</td>
</tr>
<tr>
<td><strong>How often should women get pap smears?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a year</td>
<td>49 (34.5)</td>
<td>178 (72.4)</td>
</tr>
<tr>
<td>Once a year, after particular criterion</td>
<td>1 (0.7)</td>
<td>6 (2.4)</td>
</tr>
<tr>
<td>Twice a year</td>
<td>10 (7.0)</td>
<td>15 (6.1)</td>
</tr>
<tr>
<td>Every two or three years</td>
<td>4 (2.8)</td>
<td>18 (7.3)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>35 (24.7)</td>
<td>9 (3.7)</td>
</tr>
<tr>
<td>Other</td>
<td>8 (5.6)</td>
<td>9 (3.7)</td>
</tr>
<tr>
<td><strong>What does Gardasil prevent?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPV</td>
<td>27 (19.0)</td>
<td>140 (56.9)</td>
</tr>
<tr>
<td>Cancer</td>
<td>3 (2.1)</td>
<td>19 (7.7)</td>
</tr>
<tr>
<td>STI</td>
<td>9 (6.3)</td>
<td>4 (1.6)</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>5 (3.5)</td>
<td>5 (2.0)</td>
</tr>
<tr>
<td>Infections</td>
<td>4 (2.8)</td>
<td>4 (1.6)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>47 (33.1)</td>
<td>19 (7.7)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (2.1)</td>
<td>2 (0.8)</td>
</tr>
<tr>
<td><strong>How often should a woman do a self-breast exam?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every day</td>
<td>6 (4.2)</td>
<td>9 (3.7)</td>
</tr>
</tbody>
</table>
A pap smear tests for cervical cancer.

ACOG recommends cytology testing alone every 3 years for women aged 21 to 29 years. For women aged 30 to 65 years, co-testing with cytology and HPV testing every 5 years is preferred, and screening with cytology alone every 3 years is preferred.

### How often should a man do a testicular exam?*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number (Male)</th>
<th>Number (Female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day</td>
<td>6 (4.2)</td>
<td>6 (2.4)</td>
</tr>
<tr>
<td>Every week</td>
<td>6 (4.2)</td>
<td>10 (4.1)</td>
</tr>
<tr>
<td>Every two weeks</td>
<td>0 (0.0)</td>
<td>2 (0.8)</td>
</tr>
<tr>
<td>Once a month</td>
<td>42 (29.6)</td>
<td>88 (35.8)</td>
</tr>
<tr>
<td>Every three months</td>
<td>4 (2.8)</td>
<td>10 (4.1)</td>
</tr>
<tr>
<td>Once a year</td>
<td>25 (17.6)</td>
<td>45 (18.3)</td>
</tr>
<tr>
<td>Twice a year</td>
<td>9 (6.3)</td>
<td>16 (6.5)</td>
</tr>
<tr>
<td>Every two years</td>
<td>4 (2.8)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>6 (4.2)</td>
<td>16 (6.5)</td>
</tr>
<tr>
<td>Other</td>
<td>15 (10.6)</td>
<td>10 (4.1)</td>
</tr>
</tbody>
</table>

### What STIs are tested during a routine STI test?^

<table>
<thead>
<tr>
<th>STI</th>
<th>Number (Male)</th>
<th>Number (Female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>54 (38.0)</td>
<td>127 (51.6)</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>43 (30.3)</td>
<td>103 (41.9)</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>41 (28.9)</td>
<td>49 (20.0)</td>
</tr>
<tr>
<td>Herpes</td>
<td>30 (21.1)</td>
<td>40 (16.3)</td>
</tr>
<tr>
<td>Syphilis</td>
<td>18 (12.7)</td>
<td>36 (14.6)</td>
</tr>
<tr>
<td>HPV/Warts</td>
<td>14 (9.9)</td>
<td>26 (10.6)</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>5 (3.5)</td>
<td>9 (3.7)</td>
</tr>
<tr>
<td>All</td>
<td>9 (6.3)</td>
<td>15 (6.1)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>23 (16.2)</td>
<td>24 (9.8)</td>
</tr>
<tr>
<td>Other</td>
<td>11 (7.8)</td>
<td>14 (5.7)</td>
</tr>
</tbody>
</table>

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*aCorrect answer: A pap smear tests for cervical cancer.*

*bCorrect answer: ACOG recommends cytology testing alone every 3 years for women aged 21 to 29 years. For women aged 30 to 65 years, co-testing with cytology and HPV testing every 5 years is preferred, and screening with cytology alone every 3 years is preferred.*
acceptable. Some abnormal results require repeat pap in 12 months.

Correct answer: Gardasil vaccine prevents certain types of HPV.

Correct answer: It is no longer recommended for women to perform self-breast exams. The previous recommendation was once a month.

Correct answer: It is no longer recommended for men to perform self-testicular exams.

Correct answer: STI tests are patient-specific, based on CDC guidelines.

DISCUSSION

Our study found that females are more knowledgeable about certain sexual healthcare issues than their male counterparts. This age group also presents in significant numbers to acute care locations for evaluation, as opposed to scheduling primary care preventive appointments. Females have more knowledge regarding HPV when compared to their male counterparts, leading to increased knowledge related to routine pap smears and prophylactic vaccination. They also are more familiar with knowledge of routine STI screening and hormonal birth control, perhaps stemming from experiences with routine gynecology visits and the current lack of specific male-directed guidelines.

Our survey respondents were similar to those participating in the GatorWell survey, with the majority being Caucasian female students and most reporting heterosexual orientation. When examining the sexual health knowledge questions, females in both our survey and the GatorWell survey were more likely to answer correctly versus male respondents.

Participant responses to the open-ended questions provide further insight into the sexual health knowledge of our emerging adult sample. When asked what a pap smear tests for, a substantial proportion of male respondents stated they did not know, while less than one-quarter of female respondents incorrectly said STIs. However, there were more consistent responses from females on how frequently women should get a pap smear done even though this answer is also incorrect. This could be due to frequent changes in recommendations from ACOG and USPSTF, first noted in 2003, leading to female patients not seeking up-to-date information on the most recent guidelines. If women are unsure of what sexual health screenings and tests are recommended, as well as the timing of these recommendations, they may not schedule or attend regularly scheduled primary care appointments with their provider.

Only 57% of females and 19% of males in our sample were able to correctly identify that the human papillomavirus vaccine prevents HPV. This is particularly concerning, due to the ongoing efforts of healthcare professionals and public health programming to provide education on this topic. There are currently multiple media outreach efforts to educate both children and parents about the vaccine. Both genders also believe that self breast and testicular exams should occur monthly, even though these are no longer recommended; however, physicians do routinely encourage patients to become familiar
with their bodies so they will recognize any acute changes.

There was significant variability in responses when asked which STIs are tested for in a routine STI test. The majority of females responses were across six different options: chlamydia, gonorrhea, HIV/AIDS, herpes, syphilis, and HPV/warts. Males had a similar spread across responses, but were more likely than females to state they did not know (16%). This may be due to lack of discussion during the patient visit. Each encounter is geared toward patient risk factors, gender and sexual orientation, and disease prevalence in an area. The most common answer among most males and females were chlamydia and gonorrhea, possibly due to current ACOG recommendations for females; however, HIV should be tested for at least once in a lifetime and more as indicated by risk.

**Implications**

The knowledge gained from this study has the potential to impact acute care physician practice, as providers are limited in the time that they can spend with each patient. If physicians are aware that more time may be needed improving male healthcare knowledge, discussions could be focused on areas of identified knowledge deficits in hopes of improving preventive care overall. One area of focus should be on improving HPV education, especially due to a recent report that one out of nine males in the U.S. have oral HPV, which can lead to oropharyngeal and genital cancers.18

There is also concern that sexual health knowledge is obtained from peers and from unreliable internet sources. If physicians can help to provide accurate knowledge at each visit, young adults may be able to make more educated decisions concerning their sexual health. Males could become more involved in preventive care, with improved overall knowledge leading to more involvement in the care of their female friends and sexual partners. This could lead to safer sex techniques, more effective contraceptive practices, and improved overall health status. According to WHO, unsafe sex practices remain a serious concern. Roughly 357 million people aged 15-49 are infected each year with gonorrhea, chlamydia, syphilis or trichomoniasis.19 As males develop more accurate sexual health knowledge, they may be more likely to initiate and maintain routine visits for preventive health screenings, leading to decreases in rates of communicable diseases and increasing support for females in maintaining their preventive care. There is an opportunity to significantly improve both male and female emerging adults’ sexual and overall health; the largest opportunity to impact these patients may be in the acute patient setting.

**Limitations**

There are a number of limitations with the present study. First, using a self-report survey as a measurement tool poses its own set of limitations. These include whether or not patients are reporting honestly, whether or not patients understand questions being
asked of them, and many forms of response bias. Second, our survey was distributed at limited hours of the day depending on the availability of the research assistants to work at the different clinical sites. Although covering eight hours on most days during the semesters, evenings and nights were not covered. Next, we included 18 to 24 year olds in this study to delineate “emerging adults”; however, there are other studies that consider emerging adulthood to span different age ranges than those between 18 and 24. Also, our sample was quite homogeneous, as no participants were enrolled that identified as transgender and most identified as Caucasian. Finally, our results may not be generalizable to emerging adults in other areas of the U.S., as data were only collected in one city.

CONCLUSIONS
Improving men’s sexual health knowledge could positively impact the health outcomes of all genders. A stronger emphasis on programming for sexual health knowledge throughout adolescence specifically aimed at males is needed for improvement in this area. More research should be conducted in this area in order to adequately explore this issue across the full gender spectrum and different ethnic groups.

Key Messages:

1. Providers should be prepared to evaluate and treat patients with sexual health complaints in acute care settings.
2. Increasing sexual health education programming for emerging adults could lead to improved overall health for both genders.
3. Young males in particular should be encouraged to complete preventative health visits and sexual health screenings.

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Patient Consent – Obtained.

Contributors – CB, MS, and DD collaborated in the writing of the manuscript. CB and DD were involved in the design and conducting of the survey. JB performed the statistical analyses. CB, MS, and DD revised the manuscript prior to submission.

REFERENCES

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Updates in Reimbursement and Coding – 2018

Reimbursement and coding can be an ongoing challenge for the emergency physician. This collection of courses on ACEP eCME will give you the latest information on reimbursement, quality measures and common documentation errors to help ensure you receive appropriate reimbursement for your skilled procedural work.

New ACEP Policy Statements and Information Paper

During their June meeting, the ACEP Board of Directors approved the following new or revised policy statements:

- **Access to 9-1-1 Public Safety Centers, Emergency Medical Dispatch, and Public Emergency Aid Training** – New
- **Appropriate Use Criteria for Handheld/Pocket Ultrasound Devices** – New
- **Coverage for Patient Home Medication While Under Observation Status** – New
- **Delivery of Care to Undocumented Persons** – Revised
- **Disaster Medical Services** – Revised
- **Financing of Graduate Medical Education in Emergency Medicine** – Revised
- **Guideline for Ultrasound Transducer Cleaning and Disinfection** – New
- **Impact of Climate Change on Public Health and Implications for Emergency Medicine** – New
- **Interpretation of Diagnostic Imaging Tests** – Revised
- **Interpretation of EMTALA in Medical Malpractice Litigation** – New
The Board also reviewed the information paper Emergency Department Physician Group Staffing Contract Transition (PDF)

**Articles of Interest in Annals of Emergency Medicine**

Sam Shahid, MBBS, MPH
Practice Management Manager, ACEP

ACEP would like to provide you with very brief synopses of the latest articles in *Annals of Emergency Medicine*. Some of these have not appeared in print. These synopses are not meant to be thorough analyses of the articles, simply brief introductions. Before incorporating into your practice, you should read the entire articles and interpret them for your specific patient population.

Duber HC, Barata IA, Cioe-Pena E, Liang SY, Ketcham E, Macias-Konstantopoulos W, Ryan SA, Stavros M, Whiteside LK. **Identification, Management and Transition of Care for Patients with Opioid Use Disorder in the Emergency Department**

In this clinical review article, they examine the current body of evidence underpinning the identification of patients at risk for OUD, ED-based symptomatic treatment of acute opioid withdrawal, medication-assisted treatment (MAT) of OUD upon discharge from the ED, and transition to outpatient services. In this article they also present options for targeted opioid withdrawal and management, as well as a variety of other medications to consider for symptomatic opioid withdrawal treatment for patients that do not require opioids for acute pain. **Full text available here.**

Klein LR, Driver BE, Miner JR, Martel ML, Hessel M, Collins JD, Horton GB, Fagerstrom E, Satpathy R, Cole JB. **Intramuscular Midazolam, Olanzapine, Ziprasidone, or Haloperidol for Treating Acute Agitation in the Emergency Department**
In this prospective observational study of 737 patients, medications were administered based on an a priori protocol where the initial medication given was predetermined in the following 3-week blocks: haloperidol 5mg, ziprasidone 20mg, olanzapine 10mg, midazolam 5mg, haloperidol 10mg. The primary outcome was the proportion of patients adequately sedated at 15 minutes, assessed using the Altered Mental Status Scale (AMSS). Results showed that Intramuscular midazolam achieved more effective sedation in agitated ED patients at 15 minutes than haloperidol, ziprasidone, and perhaps olanzapine. Olanzapine provided more effective sedation than haloperidol. No differences in adverse events were identified. Full text available here.

Brenner JM, Baker EF, Iserson KV, Kluesner NH, Marshall KD, Vearrier L. Use of Interpreter Services in the Emergency Department

This paper highlights the importance of effective communication in the provider-patient therapeutic relationship and how language barriers have the potential to compromise all aspects of medical care. The authors identify that in the US, as of 2013, more than 25 million persons had limited English proficiency, making quality medical interpreter services an important public health issue that affects a large proportion of our diverse population. They recommend that a professional interpreter should be offered if practical and available when a patient has either limited English proficiency or hearing impairment and that a modality of interpretation should be chosen between in-person, video, or telephone based on what best suits the clinical situation. Full text available here.


The objective of this study was to determine how well a new FDA approved single cardiac troponin T Generation 5 (cTnT Gen 5) below the level of quantification (6 ng/L) baseline measurement and a novel study derived baseline/30 minute cTnT Gen 5 algorithm might adequately exclude acute myocardial infarction (AMI) in patients with suspected acute coronary syndrome (ACS) in a United States (US) Emergency Department (ED). They enrolled patients presenting with any symptoms suspicious of ACS. Baseline and 30 minute blood samples were obtained, the cTnT Gen 5 levels later batch analyzed in an independent core lab and the AMI diagnosis was adjudicated by a cardiologist and an emergency physician. They found that a single baseline cTnT Gen 5 measurement <6 mg/L and values at baseline <8 ng/L and a delta 30 minute < 3 ng/L ruled-out AMI in 28.8% and 41.0% of patients respectively. The authors did identify limitations such as single center ED, selection bias and the exclusion of patients with life-threatening illness, cardioversion or defibrillation within 24 hours of presentation, STEMI patients requiring immediate reperfusion or those who were pregnant or breast feeding, and highlighted that additional multi-center US studies evaluating these ultra-rapid AMI
ruleout guidelines are needed.

Friederich A, Martin N, Swanson MB, Faine BA, Mohr NM. **Normal Saline and Lactated Ringer’s have a Similar Effect on Quality of Recovery: A Randomized Controlled Trial**

The purpose of this single-site participant- and evaluator-blinded, 2-arm parallel allocation (1:1), comparative effectiveness randomized controlled trial study was to test the hypothesis that balanced crystalloids improve quality of recovery more than normal saline (0.9% sodium chloride, NS) in stable Emergency Department patients. 157 Patients allocated to receiving IV fluids in the ED before discharge to were randomized to receive 2 L of Lactated Ringer’s (LR) or NS. The primary outcome was symptom scores measured by the validated Quality of Recovery-40 (QoR-40) instrument (scores 40-200) 24 hours after enrollment. Results showed that there was no difference in post-enrollment QoR scores between NS and LR groups. Although pre-enrollment scores were higher in the LR group, adjusting for pre-survey imbalances did not change the primary outcome. The authors concluded that NS and LR were associated with similar 24-h recovery scores and 7-day health care utilization in stable ED patients.

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**Preorder the Title that Celebrates the Depth and Diversity of EM**

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Interested in GED Accreditation?

Learn how to develop a Geriatric Emergency Department (GED) with this three-hour geriatric pre-conference during ACEP18. Hear from the geriatric experts who will walk you through the increasing need for geriatric medicine focusing on GED clinical workflows, training and staff development, geriatric-focused policies and protocols, and achieving GED accreditation. Panel discussions include institutions who have been awarded accreditation.

Emergency Ultrasound Tracker

Emergency physicians regularly apply for hospital credentials to perform emergency procedures including emergency ultrasound. Theoretically, ultrasound training, credentialing and billing should be no different than other emergency procedures where training occurs in residency and an attestation letter from the residency is sufficient for local credentialing. When such training occurs outside of residency, “proctored pathways” often serve to assure competency. There is still a lack of understanding and awareness in the general medical community that emergency physicians routinely train in and perform point-of-care ultrasound.

The Emergency Ultrasound Tracker was created to assist members in achieving official recognition of ultrasound skills. This tool allows you to easily keep track of ultrasound scans you
have performed over the course of your career in emergency medicine. It also allows you to upload relevant documents that attest to your training. After inputting and self-attesting to your ultrasound information you may download a letter of recognition from ACEP so long as you have attested to meeting the recommendations for emergency ultrasound training put forth in the ACEP Ultrasound Guidelines. We hope you find this tracker tool helpful and useful in your practice.

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**NEMPAC 2018 Election Cycle Facts:**

- **PAC Members:** 5,100
- **PAC Receipts:** $1,600,000*
- **PAC Disbursements:** $1,590,000*
- **2% Growth in PAC members since 2016**
- **75 Events hosted or co-hosted by NEMPAC for Republican and Democrat candidates and incumbents.**
- **700 fundraisers, meet and greets and campaign briefings providing opportunities to promote ACEP and emergency medicine.**

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**NEMPAC Mid-Term Election Update**

With the mid-term elections just months away, ACEP and the National Emergency Medicine Political Action Committee (NEMPAC) are focused on electing candidates who will work on bipartisan solutions to address emergency medicine’s most pressing issues. The NEMPAC Board and staff rely on input from ACEP state chapters and local ACEP members when evaluating support for incumbent legislators and new candidates – we want to hear from you! NEMPAC is the 4th largest medical PAC and will continue to grow with your support. Learn more about NEMPAC today by visiting [our website](#) or contact Jeanne Slade. Keep an eye on your inbox for additional details about NEMPAC’s activities as we get closer to the elections.

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**ED ICU Development and Operations Workshop Pre-Conference**

San Diego Convention Center, Upper Level, 7B
Sunday, September 30, 2018 | 12:30 pm to 5:00 pm
If you have ever considered developing an ED ICU this workshop is for you. Participants will learn about staffing, reimbursement, collaborations, and business plan development, with the goal of developing and running their own ED-ICU. This program is directed at those along the entire continuum of ED-ICU development from conceptual to operational phases. Register here. For more information, contact Margaret Montgomery, RN MSN.

NEWS FROM THE AMERICAN BOARD OF EMERGENCY MEDICINE – JULY 2018

Subspecialty Certification in Neurocritical Care

The American Board of Medical Specialties (ABMS) has approved subspecialty certification in Neurocritical Care (NCC). NCC is co-sponsored by the American Board of Anesthesiology (ABA), the American Board of Emergency Medicine (ABEM), the American Board of Neurological Surgery, and the American Board of Psychiatry and Neurology (ABPN). Physicians certified by these four boards who meet the eligibility criteria for NCC will have the opportunity to become certified in NCC.

There will be two pathways to certification in NCC: a training pathway and a time-limited practice pathway. The practice pathway will start at the time the first exam is offered. Eligible pathway criteria will be posted on the ABEM website by the end of 2018. ABPN will develop and administer the examination; physicians will submit applications to their primary certifying board. The first examination is expected to take place in either 2020 or 2021.

Letter Available Refuting Merit Badge Requirements

ABEM provides a letter of support that may be submitted to hospital administrators to forego the mandatory completion of short courses or additional certifications (“merit badges”) often needed for hospital privileges. Physicians must be participating in the ABEM MOC Program to obtain the letter.

The letter, signed by each representative of the Coalition to Oppose Medical Merit Badges (COMMB), details specific activities that board-certified physicians perform to
maintain certification. ABEM-certified physicians can now download the letter from their Personal Page on the ABEM portal by doing the following:

- Sign in to the ABEM portal at [www.abem.org](http://www.abem.org)
- On the left navigation, click “Print Verification of ABEM Status”
- Under letter type, click “General Coalition ABEM”
- Click “Continue to Next Step”

**Take the ConCert™ Early - Retain Your Current Certificate Date**

You can take the ConCert™ Examination during the last five years of your certification (during the annual testing window). If you pass the exam early, you will still retain your certification until the expiration date on your current certificate. This is also true even after you complete all of your MOC requirements. When your current certification expires, you will be issued a new, ten-year certificate. If you take the ConCert™ Examination early and do not pass, you still retain your certification and have another chance(s) to pass it. ABEM only reports whether a physician is board certified and participating in MOC.

In 2017, 44 percent of ConCert™ test takers registered to take the exam early; that is, in a year prior to their final year of certification.

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**Welcome New Members**

Vladimir G Bernstein  
Chaewon Im

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