REMOVING THE SHELF CUTOFF TO ACHIEVE HONORS IN THE CLERKSHIP DOES NOT AFFECT TEST SCORES

Holly W. Cummings, MD, MPH; DaCarla Albright, MD
Department of Obstetrics and Gynecology
Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

INTRODUCTION

The Perelman School of Medicine at the University of Pennsylvania is a private medical school affiliated with an Ivy League university located in Philadelphia, Pennsylvania. It has an enrollment of 783 medical students. Medical students complete their required clinical clerkships in the calendar year consisting of January of their second year through December of their third year. Students complete their core clerkships prior to taking the United States Medical Licensing Exam Step 1. On the Obstetrics and Gynecology (OB/GYN) clerkship, up to 24 students rotate at one of two hospitals affiliated with PSOM (the Hospital of the University of Pennsylvania and Pennsylvania Hospital) every 6 weeks. All students are required to take and pass the National Board of Medical Examiners Clinical Science Subject Examination in OB/GYN (“shelf” exam).

METHODS

• First-attempt shelf scores were compared between 2016 (the most recent year in which a cutoff was used) and 2017 (the first year in which the cutoff was removed).
• Descriptive and comparative statistical analyses were performed, including mean, standard deviation, and Student’s T-test (two-tailed).
• NBME data on academic year norms and statistics were obtained from the NBME Score Interpretation Guide for the Obstetrics and Gynecology Exam. The NBME publishes means for the academic year (July-June) and each quarter.
• Mean values for Quarters 3 and 4 of the prior academic year, and Quarters 1 and 2 of the subsequent academic year, were combined and re-averaged to calculate the mean value for the calendar year. In order to be able to compare values between NBME data and the PSOM clerkship.

RESULTS

Table 1. Descriptive and Comparative Statistics

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>161</td>
<td>163</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>61-93</td>
<td>53-94</td>
<td></td>
</tr>
<tr>
<td>Minimum score to pass</td>
<td>65</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Cutoff for Honors</td>
<td>79</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Number of failing scores</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>80.58 (6.34)</td>
<td>80.42 (6.38)</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Table 2. NBME Reference Data

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Q3 (Jan-Mar)</td>
<td>Q4 (Apr-Jun)</td>
<td>Q1 (Jul-Sep)</td>
<td>Q2 (Oct-Dec)</td>
<td>Q3 (Jan-Mar)</td>
</tr>
<tr>
<td>N</td>
<td>5,200</td>
<td>4,409</td>
<td>4,892</td>
<td>4,239</td>
</tr>
<tr>
<td>Mean</td>
<td>78.3</td>
<td>78.5</td>
<td>77.6</td>
<td>77.6</td>
</tr>
<tr>
<td>SD</td>
<td>7.8</td>
<td>7.8</td>
<td>8.1</td>
<td>7.4</td>
</tr>
</tbody>
</table>

CONCLUSIONS

• When the shelf cutoff for Honors was removed, there was no difference between the mean shelf score from 2016 to 2017.
• There was no difference in mean shelf scores nationally in the same time frame.
• There was no difference in the number of students who failed the test when the shelf cutoff for Honors was removed.
• Students continued to achieve similar performance on the exam without the additional factor of using the shelf exam to qualify for Honors.
• These results were used to encourage other clerkships at PSOM to remove the cutoff for Honors in 2018.
• Ongoing data continue to be collected to observe for changes in exam performance over time.
• Additional factors for measurement of mastery of clerkship material continue to be sought.

ABSTRACT

Purpose: To identify students’ performance on the NBME subject examination changes when a minimum score requirement for Honors is removed.

Background: The NBME subject examination is used in many obstetrics and gynecology clerkships as an objective measure of knowledge. The exam score may be included in the calculation of a student’s final grade, with a requirement to achieve a certain minimum score to be eligible for a grade of Honors. At our institution, this cutoff was removed from the obstetrics and gynecology clerkship in 2017.

Methods: Scores for the Obstetrics and Gynecology subject examination at the University of Pennsylvania were compared between 2016 (the most recent year in which a cutoff was used) and 2017 (the first year in which the cutoff was removed). Comparative statistical analyses were performed, including mean, standard deviation, and Student’s T-test.

Results: In 2016, 161 students took the NBME subject examination, during which time a minimum score of 81 was required to be eligible for a final grade of Honors. At our institution, this cutoff was removed from the obstetrics and gynecology clerkship in 2017. Comparative statistical analyses were performed, including mean, standard deviation, and Student’s T-test. The mean grade of Honors was 80.58 (range 61.93, standard deviation 6.34). In 2017, the minimum cutoff requirement was removed, and 163 students took the exam. The mean score was 80.42 (range 53.94, standard deviation 6.38). The T-test result for comparison between the two means was 0.81.

Discussion: At this academic institution, the mean NBME subject examination score did not change between the two years. Students continue to study for the final exam when the minimum cutoff is removed.

REFERENCES