DISRUPTION OF ASSESSMENT – DOES THE PORTFOLIO EXAMINATION CORRELATE WITH PERFORMANCE OF STUDENTS IN THE FINAL MBBS EXAMINATIONS.

2020
Dr. Munandy Alagar
Dr. Aung Ko Ko Min
Dr. Rafeah Pakri Mohamed
Mr. Abdul Rahmat Tan
INTRODUCTION

- The COVID-19 pandemic resulted in major disruption in conventional teaching and assessment in the Medical School at MAHSA University.

- The portfolio has been used as a measure of clinical exposure of students in the clinical years. This is the fourth batch in which the portfolio was used as an assessment tool.

- Students are expected to compile a portfolio of 10 clinical cases. During the examination, they are questioned on randomly selected case/cases by a pair of examiners.

- Due to restrictions imposed by the pandemic, we altered the portfolio examination pattern to encompass a half-hour examination on one of the cases submitted.

- Our postulate was that it would be a proxy to the long case performance.
This was a cross sectional study to look at correlation of performance in the portfolio examination to the clinical portion of the Final Professional Examination.

We also compared the performance over two batches to look for correlation.

In the portfolio examination, students were assessed over 4 areas:
- History and Examination
- Diagnosis and Management
- Discussion
- General Presentation.
RESULTS

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio Total %</td>
<td>66.1</td>
<td>10.6</td>
</tr>
<tr>
<td>History %</td>
<td>65.8</td>
<td>13.6</td>
</tr>
<tr>
<td>Diagnosis %</td>
<td>67.0</td>
<td>11.2</td>
</tr>
<tr>
<td>Discussion %</td>
<td>64.5</td>
<td>12.3</td>
</tr>
<tr>
<td>General %</td>
<td>73.8</td>
<td>15.6</td>
</tr>
</tbody>
</table>

Table 1. percent average marks of each section of portfolio assessment (2015 batch)

<table>
<thead>
<tr>
<th></th>
<th>Total portfolio</th>
<th>History</th>
<th>Diagnosis</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>0.910</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnosis</td>
<td>0.830</td>
<td>0.713</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td>0.932</td>
<td>0.768</td>
<td>0.708</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>0.323</td>
<td>0.192</td>
<td>0.315</td>
<td>0.236</td>
</tr>
</tbody>
</table>

Table 2. Correlation among different sections of portfolio for Batch 2015
**RESULTS**

Table 3. Correlation between portfolio and different components of clinical assessment

<table>
<thead>
<tr>
<th>Batch</th>
<th>Clinical Total</th>
<th>OSCE-unmanned stations total</th>
<th>OSCE-manned stations total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>Portfolio</td>
<td>0.266</td>
<td>0.284</td>
</tr>
<tr>
<td></td>
<td>Clinical Total</td>
<td></td>
<td>0.540</td>
</tr>
<tr>
<td>2015</td>
<td>Portfolio</td>
<td>0.295</td>
<td>0.255</td>
</tr>
<tr>
<td></td>
<td>Clinical Total</td>
<td></td>
<td>0.945</td>
</tr>
<tr>
<td>Both 2014 &amp; 2015 combined</td>
<td>Portfolio</td>
<td>0.249</td>
<td>0.242</td>
</tr>
<tr>
<td></td>
<td>Clinical Total</td>
<td></td>
<td>0.689</td>
</tr>
</tbody>
</table>
RESULTS

- There was good correlation between the total portfolio marks and all portions of assessment except general presentation in the students who appeared for the final examinations in 2020.
- There was moderate correlation in performance in all portions except general presentation in this same cohort.
- When we compared performance in the portfolio with performance in the clinical examinations the correlation was weak.
- This was seen in both the 2014 cohort and the 2015 cohort.
DISCUSSION

- Our postulate that the portfolio could reflect the clinical competence at exit was not borne out in this study.

- Portfolios are supposed to have the ability to drill down into the curriculum but their use is limited by a lack of standardization, unsuitability due to administrative and scoring problems and are potentially biased. This is because cases that are examined are different and examiners face difficulty with standardization in assessment. (1)

- Studies indicate that for portfolio to be useful they must have a clear purpose, be supported by strong feedback mechanism and be part of the summative assessment. This was not the case in our study as portfolios constituted a portion of continuous assessment in the final professional exam. We also face the challenge of having to train academic staff to assess the portfolio objectively using the rubric provided as well as making time in the clinical years to provide feedback regarding the portfolio.

- A well run portfolio process with reflective writing is associated with improved academic performance. (3)
CONCLUSION

- The portfolio examination in the current form is not a good indicator of clinical performance.
- This could be due to the theoretical nature of the examination.
- Other contributing factors could be the "failure to fail" phenomenon among examiners.
- And because this portion of the examination contributes to the continuous assessment portion of the Final MBBS.


THANK YOU

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