

Progress Test in Medicine still a dilemma: An impact on Adoption of International Progress Test in Saudi Arabia”

(Panel Discussion)

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Abstract

Progress testing is a well-established and evidence-based methodology that has been used in international settings for more than 25 years however, in Saudi Arabia, this concept is comparatively new and impact on overall knowledge acquisition is still debatable. Nonetheless, students in Arab culture not very well convinced for progress testing as it may affects their GPA. Hence, this study analyzed whether progress test affect students' GPA or not. Out of 8 attempts, we analyzed one of the tests usually conduct in 4th year and assessed the effect of progress test on GPA of the students.

The results showed that out of 104, 58 (56%) were males. Mean GPA scores without Progress Test scores was 4.0615 ± 0.29 (95% CI=4.0032-4.1199) with standard error of mean .02941 and Mean GPA scores with Progress Test scores was 4.0649 ± 0.30 (95% CI=4.0065-4.1234) with standard error of mean .02947. When we compared both mean there is a significant difference

($p=0.000$) in between both GPA, however GPA with and without progress test has correlation ($p=0.0000$ $r=0.96$).

Overall results conclude that there is a role of GPA for the progress test, therefore progress is considered a learning derive for students to maintain their GPA.

Key points to be discussed / resolved:

1. Importance of progress test
2. Acceptance & execution in Arab culture
3. PT should be used to monitor throughout graduation or consider as an exit exam
4. GPA should be included
5. Utilization of progress test as learning derive

Key words: Progress test; GPA; PBL; Assessment

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1. Introduction

Progress testing refers to the periodic assessment of the entire body of knowledge needed to graduate from medical school. It is a comprehensive longitudinal testing, which assesses the end of curriculum objectives acquired at graduate onset (van der Vleuten, 1996). In problem-based learning (PBL), it is still an argument that students learning through it may develop deficiencies in their knowledge (Maudsley, 1999). In order to satisfy that acquiring knowledge through PBL is appropriate was really a challenge until progress-testing approach developed in the 1970 in Missouri and Maastricht (van der Vleuten, 1996; Kirschner, Sweller, 2006). This approach provides an external monitoring of the learning process through PBL.

It may be considered one solution to the problems of assessing the knowledge bridging so called a divide between the preclinical and clinical years especially in PBL curriculum (Arnold, Willoughby, 1990). Progress testing is a well-established and evidence-based methodology that has been used in international settings for more than 4 decades (Freeman, 2010). However, in Saudi Arabia, this concept is comparatively new and impact on overall knowledge acquisition is still debatable. This method has a number of advantages over traditional medical school exams, including identification and address learning needs of students, help them for assessing their progress every year and compare their level of knowledge with others (Tio, 2016). Nonetheless, students in Arab culture not very well convinced for progress testing as it may affects their GPA. Hence, this study analysed whether progress test affect students' GPA or not.

2. Method

In College of Medicine, King Faisal University we have adopted a PBL based curriculum from Netherlands including a progress test as it conducts in Netherlands internationally. In this examination, the eight medical schools participate for each test. This means that more than 10,000 students sit the exam at the same time. In our collaboration, we plan the dates well ahead taking into account local logistics and local and national holidays. The exam consists of 4 quarterly tests of 200 items each (Tio, 2016). There are total eight attempts allowed for all students to clear progress test as a six credit hour course. Out of eight attempts, we have selected

one test result randomly and analyzed the data to assess the effect of progress test on GPA of the students. There were in total 104 students appeared in that attempt. We used SPSS IBM version 22 for analysis of the data. Applied independent t-test for comparing mean difference and assessed the correlation in between data with or without GPA. A less than or equal to 0.05 p-value was considered significant for assessing any difference or association.

3. Results

The results showed that out of 104, 58 (56%) were males. Mean GPA scores without Progress Test scores was 4.0615 ± 0.29 (95% CI=4.0032-4.1199) with standard error of mean .02941 and Mean GPA scores with Progress Test scores was 4.0649 ± 0.30 (95% CI=4.0065-4.1234) with standard error of mean .02947. When we compared both mean there is a significant difference ($p=0.000$) in between both GPA, however GPA with and without progress test has correlation ($p=0.0000$ $r=0.96$).

Overall results conclude that there is a role of GPA for the progress test, therefore progress is considered a learning derive for students to maintain their GPA. However, this study dealt only one test result so cannot be generalized. It is needed to discuss further the implications of including progress test in the GPA for entrance to postgraduate training program in Saudi Arabia.

4. Discussion

The progress test conducting in Netherlands is considered an extraordinary for many reasons. It is a curriculum-independent test in which 5 medical schools contribute in producing test, it combines formative and summative aspects of assessment. Finally, it is a rich source of information for students, researchers, schools and policymakers, for instance for comparing curricula and monitoring curricular changes (Tio, 2016). Since we have adopted this test in the same form so we are also beneficiary of all these advantages. However, it is difficult to persuade students for underrating benefit of these tests. The students are not convinced in general that the progress test should be inculcated with GPA because it affects badly their performance and might not allow them easily to get entrance into postgraduate training programs. This study revealed

and endorsed that there is a significant difference in between two progress test scores, which means that there is an effect of progress test on GPA.

In order to recognize the context and redundancy about progress test, we need to have an overview of educational system in Arab world generally and specifically in Saudi Arabia. In secondary schools with teacher-centred educational systems, students are generally less independent within the learning process; one might claim that such students are ‘spoon-fed’ the requisite knowledge by their teachers (Dehler, Welsh, 2014; Smith, 2008) Furthermore, the examination process encourages students to focus solely on their grades, inhibiting them from learning information outside of the set curricula. This deters self-directed learning (SDL), which incorporates highly useful skills, particularly when subsequently entering a demanding and challenging learning environment such as a medical school (Frambach et al, 2012). Graduating from a secondary school to a medical school presents a transitional challenge for many students due to the lack of academic rigour, self-motivation and dedication to lifelong learning necessary to become a competent physician (Khan, 2018). Thus, many students are not prepared to improve their studies by themselves, therefore, probably underrate the importance of progress test which is a curriculum-independent test.

However, the progress test assesses all skills gradually which are obviously relevant to blocks teaching as well as independent learning which may base on supplementary goals. Thus, it should be realized that it could be the most important (if not the only) knowledge assessment of a curriculum (Tio, 2016).

5. Conclusion

The study illustrated that there is a difference in between progress test score with and without GPA, but it doesn’t undermine the importance of progress test as a comprehensive assessment tool.

6. Limitation

The study's results cannot be generalized as it was conducted only on one progress test result and one test. It is recommended to have the study for completing five years and assesses the trend for progression and its effect on GPA.

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Tbale 1: Descriptive Ananlysis of data

ProgressTest Scores	Mean	Std. Deviation	Median	Variance	95% Confidence Interval	
					Lower Bound	Upper Bound
GPA scores without Progress Test scores	4.0615	0.29993	4.0600	0.090	4.0032	4.1199
GPA scores with Progress Test scores	4.0649	0.30055	4.0650	0.090	4.0065	4.1234

Table 2. Comparison of Progress Test scores with and without GPA

Variables	t-value	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
GPA scores without Progress Test scores	138.09	.000	4.06154	4.0032	4.1199
GPA scores with Progress Test scores	137.92	.000	4.06490	4.0065	4.1234

Table 3. Gender difference in between two Progress test scores with and without GPA

Progress test scores with GPA	Gender	GPA		Total	P-Value
		GPA (<= 3.9)	GPA (>=4)		
GPA scores without Progress Test scores	Male	27	31	58	0.108
GPA scores with Progress Test scores	Female	15	31	46	
Progress test scores without GPA		GPA (<= 3.9)	GPA (>=4)	Total	P-Value

GPA scores without Progress Test scores	Male	28	30	58	0.232
GPA scores with Progress Test scores	Female	18	28	46	