



The Effectiveness of Pharmacokinetics Preview Program in Student Success in a Nontraditional Doctor of Pharmacy Program

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Introduction:

- The rapid changes in the health care system require practicing pharmacists to acquire knowledge and skills in multiple areas.
- The NTDP program provides the opportunity for practicing licensed pharmacists with a Baccalaureate degree in pharmaceutical sciences to obtain their Pharm.D. degree without a major interruption of their professional careers.
- This was a retrospective study at Howard University College of Pharmacy. We identified a total of six student cohorts. Three were pre-preview sessions, and the other three were post-preview sessions.
- There are previous studies that discussed the key elements that affect students' success in NTDP programs such as "Key Elements Towards Academic Success for Nontraditional students in Pharmacy School" by Karimi and Khan, they found that life-experience and motivation combined with a bachelor degree are key elements towards students' success, Also, "Predictors of Academic Success in a Nontraditional Doctor of Pharmacy Degree Program at Historically Black College and University" study by Karodeh et al discussed demographic factors effect on students' success. They found that international NTDP students have higher cumulative GPA.
- There was a knowledge gap regarding the effect of Pharmacokinetics preview sessions in students' success.

OBJECTIVE:

The objective of the study is to determine the effectiveness of the pharmacokinetics preview program in student success in a Nontraditional Doctor of Pharmacy Program.

METHODS:

- This was a retrospective study at Howard University College of Pharmacy. We identified a total of six student cohorts. Three were pre-preview sessions, and the other three were post-preview sessions.
- The primary outcome of this study is to determine if the implementation of preview sessions would help improve students' performance.
- Independent t-test and Chi-square were used to compare the outcomes of the two groups.

Figure 1a: Grades mean for pre-preview cohorts

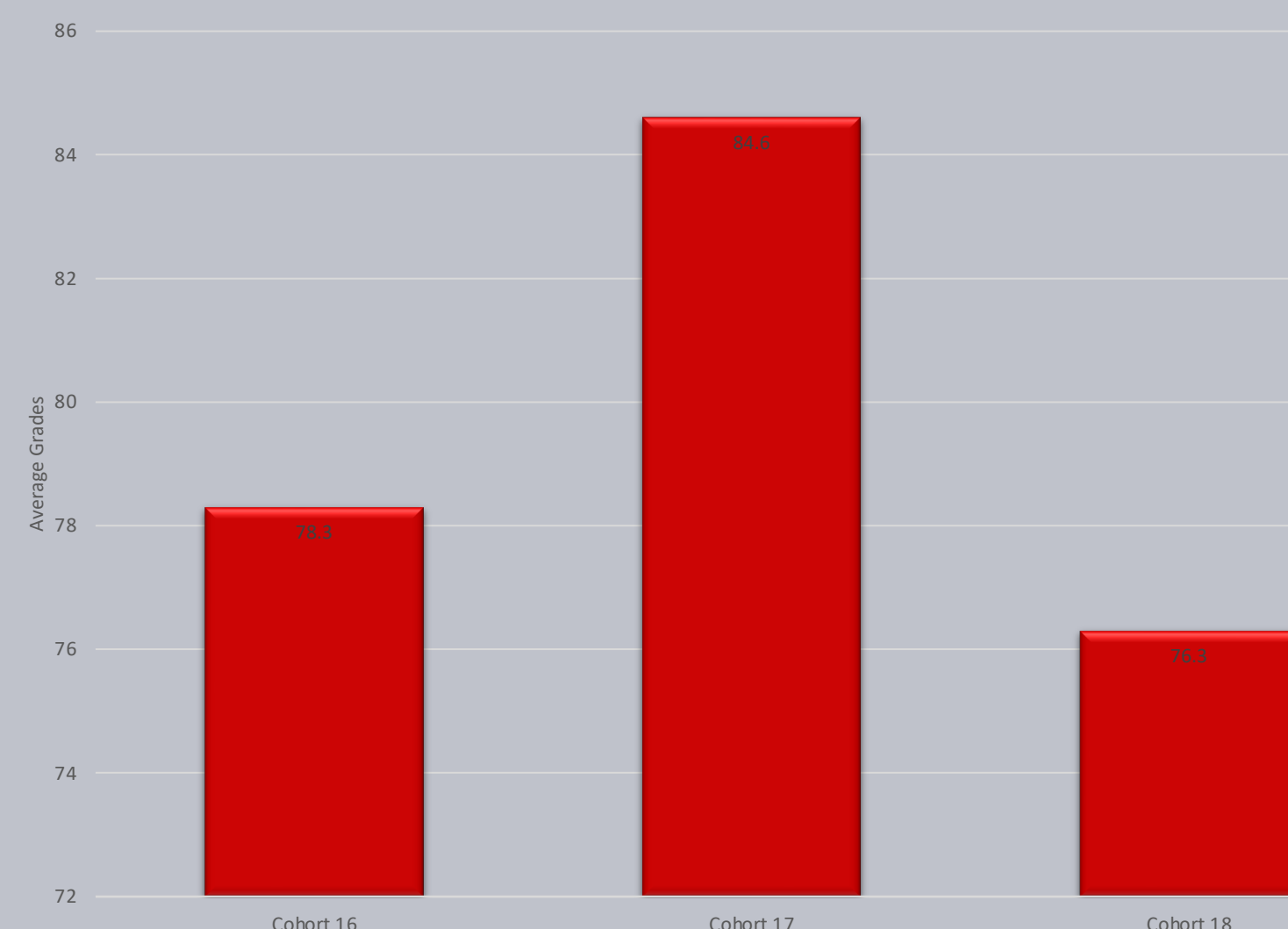
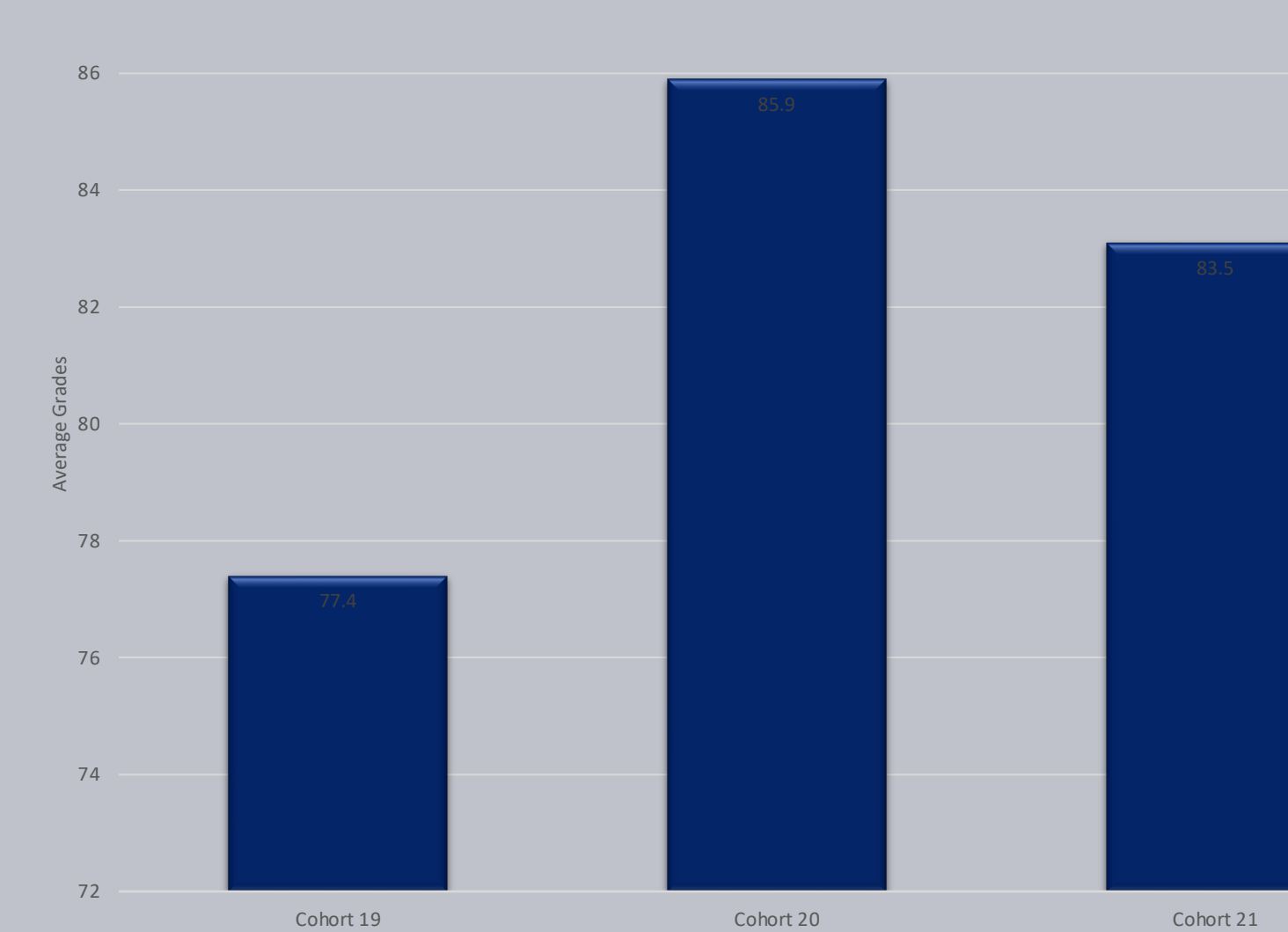


Figure 1b: Grades mean for post-preview cohorts



RESULTS:

- A total of ninety-four students were included in our study.
- Forty-five (47.9%) students were in the post-preview session group.
- The exam results mean of the pre-preview session and post-preview session students were 80.1 and 83.4, respectively.
- This difference was not statistically significant (p-value 0.13, [95% CI -7.7389 - 1.0964]).
- A total of seven students failed their Pharmacokinetics course in the pre-preview session group, and six students in the post-preview session group.
- The number of failures was not statistically significant (p-value 0.89)

	Pre-Group	Post-Group
Number of students	49	45
mean	80.0969	83.4182
SD	11.9914	9.2627
Failed	7	6

The two tailed P-value= 0.1388
95% CI of difference from -7.7389 to 1.0964
Failed vs passed in two groups: P-value 0.89

Figure 2a: Pre-Groups: 7 out of 49 students failed

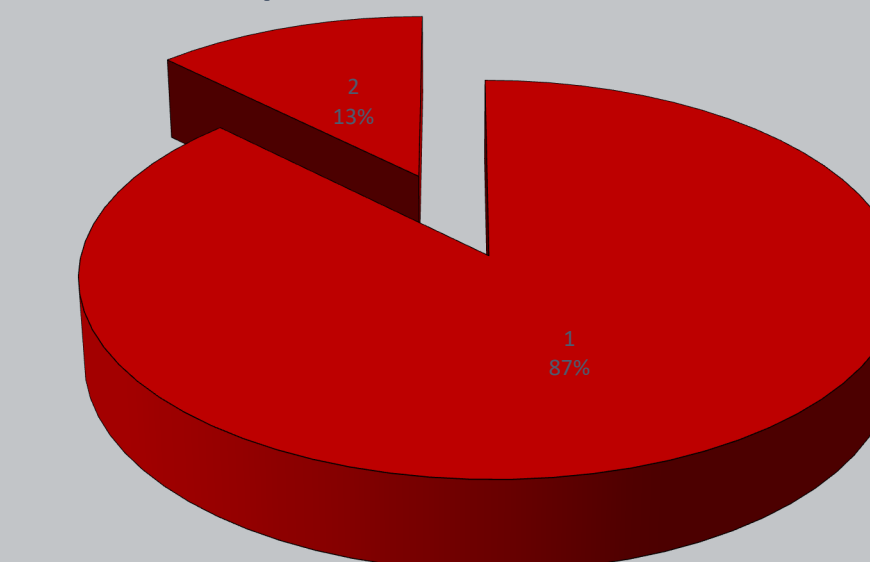
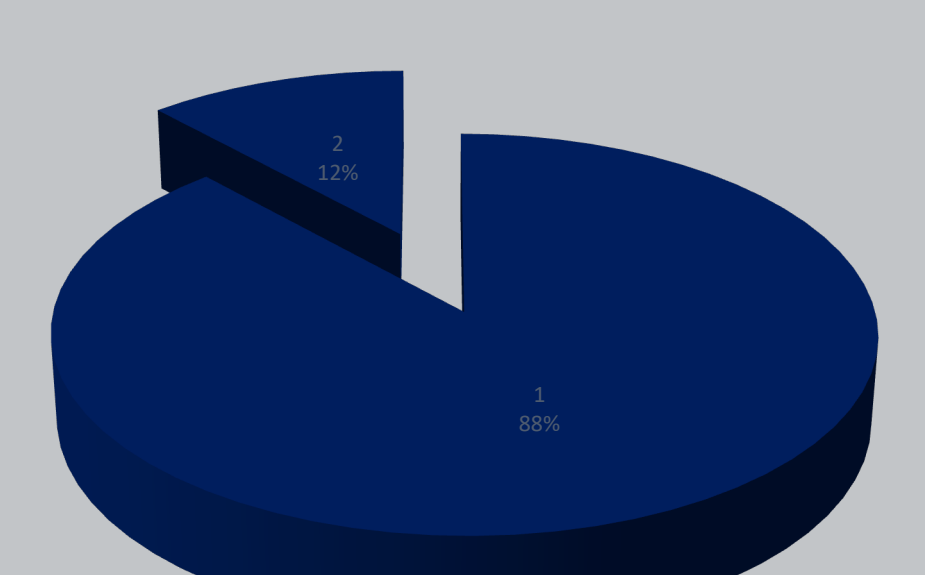


Figure 2b: Post-Groups: 6 out of 45 students failed



Conclusion:

In our study, offering pharmacokinetics review sessions before the beginning of the semester did not significantly increase students' performance in exams.

REFERENCES

- Karimi, R, Khan, S, *J. Appl. Sci. Res.*, 3(6): 427-430, 2007
- Karodeh, Y, DOI: <https://doi.org/10.5688/ajpe8600>