A PRE-MATRICULATION PROGRAM (PMP) IMPROVED BASELINE KNOWLEDGE AND RETENTION RATES FOR FIRST-YEAR UNDERREPRESENTED MINORITY PHARMACY STUDENTS

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Introduction

The number of first-year students who have remediated or who have been dismissed has steadily increased over recent years. On our campus, underrepresented minority (URM) students comprise a larger proportion of all students who remediate.

Through a program funded by a Texas Higher Education Coordinating Board grant titled Minority Health Research Education Grant Program, we decreased the number of dismissals of first-year URM students while enhancing their retention rates.

Aggie Student Pharmacists Initiative for Recruitment | Retention and Education (ASPIR2E) is a 4-track recruitment and retention program. Track 1 and Track 2 currently partner with Texas A&M University in College Station and Texas A&M University-Kingsville. Tracks 3 and 4 are open to admitted students. This poster is focused on **TRACK 3 only.** It details the program design and results after one year of data collection.

Program Design

The goal of the Pre-Matriculation Program (PMP) is to increase retention of admitted URM students before they matriculate. The Pre-Matriculation Program is a six week summer program designed to enhance retention of admitted URM students. The first and last weeks of the program were conducted on campus while the four weeks in-between were offered online.

During the face-to-face portions of the program we focused on building student peer networks, increasing students' sense of belonging, and strengthening connections to the college via faculty, staff, and student mentors (see qualitative poster #55). Online modules were designed to prepare students for five commonly difficult to pass courses.

- Biochemistry
- Chemistry
- Pharmaceutical Calculations
- Physiology
- Medical Terminology

Faculty who constructed the modules volunteered their time and expertise. While the modules were self-paced, faculty led online question-and-answer sessions. In addition to these modules, participants completed a student success module and met with a peer mentor (P2 or P3 student) a minimum of once per week. Peer mentors were compensated for their time.

Methods

Quantitative pre and post data were collected from a content-based readiness assessment in these five topics: biochemistry, organic chemistry, pharmaceutical calculations, physiology, and medical terminology. The post readiness assessment results were compared to the remaining incoming first-year student readiness assessment results. Upon completion of the Pre-matriculation Program, we also tracked participants' success in the first semester and compared it to the percentage of P1 students who were slated to remediate or who were dismissed in the previous fall semester.

To evaluate if the PMP ameliorated disparities of URM students in their baseline knowledge necessary to progress during the first year of pharmacy school we addressed two research questions:

1. Did PMP students receive higher pass rates on the post-test readiness assessment compared to non-PMP students?
2. Did the percentage of students slated to remediate or who were dismissed after the first semester decrease?
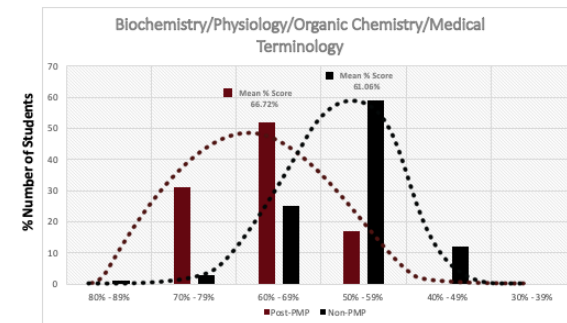
Results

The implementation of the PMP resulted in enhanced increase in participants' knowledge in all the five subject areas. Participants' mean percentage score positively shifted at post-PMP **(70.32%)** when compared to their pre-PMP performance **(52.03%)** and performance of **non-PMP participants (57.2%)**. The number of (P1) URM students dismissed at the end of the fall 2018 semester was **reduced by 50%** when compared to the previous first-year (P1) fall semesters. **23 admitted pharmacy students completed the summer 2018 program.**
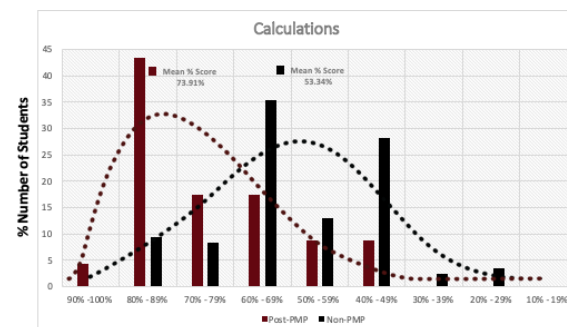
- 52% Female and 48% Male
- 26% Asian, 4% Black, 57% Hispanic, 13% White

CLASS OF 2022 PHARMACY READINESS ASSESSMENT

Biochemistry/Physiology/Organic Chemistry/Medical Terminology

Track 3 PMP Participants

Calculations

Track 3 PMP Participants

Implications

Implementation of a pre-matriculation pharmacy program can significantly decrease the number of dismissals of first-year URM students while enhancing their retention rates.