US Military Dietetic Internship and Graduate Program: Retrospective Analysis of Selection Criteria and Student Success

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ABSTRACT

Background The US Military-Baylor Graduate Program in Nutrition (GPN) has a 10% 7-year attrition rate representing wasted military resources. Evidence-based selection criteria for dietetics masters of science (MS) programs do not exist, nor does descriptive information of successful students.

Objective Identify GPN student characteristics predicting program success in the didactic and internship phases.

Design Retrospective study using demographic, academic, and nonacademic data extracted from existing files.

Participants and setting There were 72 GPN students enrolled from 2006 to 2013 in San Antonio, TX.

Main outcome measures Categorization by optimal performance (no course grade <3.0, no internship rotation delays, first attempt pass registered dietitian nutritionist examination) and GPN completion.

Results The average GPN student was female (65%), in the US Army (94%), and single (64%), with a mean age of 26 years. Mean Quantitative, Verbal Reasoning, and Analytical Writing Graduate Record Examination (GRE) scores were 149, 153, and 4.2 points, respectively. Odds of GPN failure increased 1.3 times with each year increase in age at GPN program start (95% CI=1.089 to 1.612; P=0.005). Odds of attaining optimal performance decreased 4.5 times with each additional year increase between GRE completion and GPN start (95% CI=1.623 to 16.236; P=0.005) and 0.157 times with each grade point average point decrease in Biochemistry (95% CI=0.49 to 0.430; P=0.002).

Conclusions Modification of selection criteria based on time between GRE and GPN start and undergraduate Biochemistry grades could improve GPN success. However, identification and mitigation of potential student weaknesses is a more realistic approach to promote student success. Intentional development of students with optimal characteristics will strengthen the dietetics profession during the transition to an MS degree requirement.
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THE US MILITARY DIETETIC INTERNSHIP IS AN accredited internship by The Accreditation Council for Education in Nutrition and Dietetics and the predominant avenue for civilian nutrition students to become a military registered dietitian nutritionist (RDN). The internship was expanded to become the US Military-Baylor University Graduate Program in Nutrition (GPN) in 2006. The GPN is a two-phased 21-month program (Figure). Phase 1 is the 9-month didactic phase and includes 45 credit hours of graduate-level coursework at the Health and Readiness Center of Excellence in San Antonio, TX. Phase 2 is 12-month clinical internship phase and includes 9 credit hours of research and over 1,300 hours of supervised practice in dietetics, food service, and research at one of four internship sites. Overall, the program provides a military emphasis to prepare RDNs for the unique challenges faced by military members within health care. The rigorous nature of this program demands diligent selection of qualified, resilient applicants.

Typical components of graduate applicant selection include indicators of academic performance and noncognitive assessment tools. The minimum requirements for GPN applicants include an undergraduate grade point average (GPA) ≥3.0, Graduate Record Examination (GRE) Verbal Reasoning score ≥148 points, GRE Quantitative Reasoning score ≥149 points, and GRE Analytical Writing score ≥3.5 points.

The rationale for conducting this retrospective analysis was based on government budgetary concerns, considering an annual program attrition rate of 8% to 10%, with each occurrence of program failure representing an estimated $67,000 per year (based upon 2016 salary and training costs). There is a paucity of information concerning attrition rates in civilian institutions with combined master's degree program and dietetic internship.

Research over the past 10 years yields conflicting results when using undergraduate academic performance measures (eg, GRE, GPA, specific course grades) as a screening tool for graduate-level student selection, as predictors of graduate-level education success, or to identify likelihood of academic difficulty in order to provide early intervention.[1-6] Recent research suggests the GRE is a commonly used cognitive performance assessment tool; however, it frequently is used improperly as a composite score vs individual scores.[7-10]

The profession of dietetics is constantly evaluating the educational requirements and opportunities for RDNs, comparing RDNs to other professions[11] and anticipating changes in dietetics workforce demand.[12-16] With the new requirement that the profession of dietetics will transition to a master's degree for entry-level RDNs by 2024, new insight is needed regarding characteristics that are associated with successful dietetics graduate students and interns.

The purpose of this study was to conduct a retrospective analysis of GPN students enrolled from 2006 to 2013 in San Antonio, TX, to identify student characteristics predictive of optimal program performance or failures in the didactic (phase 1) and clinical (phase 2, internship) phases of the GPN.

RESEARCH SNAPSHOT

Research Question: What graduate nutrition program selection criteria predict student success?

Key Findings: Modifiable selection criteria did not predict success; postgraduate nutrition programs should instead focus on identifying and supporting those students experiencing academic or personal challenges.

This study may contribute to the body of knowledge pertinent to military and civilian professional education of RDNs.

METHODS

This was a retrospective descriptive research design reviewing academic files of all 72 GPN students who were enrolled from 2006 to graduation in 2013. This included six RDN residents completing phase 1 only. Over the 7-year period analyzed, four internship sites were available: Brooke Army Medical Center in San Antonio, TX; Walter Reed National Military Medical Center in Bethesda, MD; Madigan Army

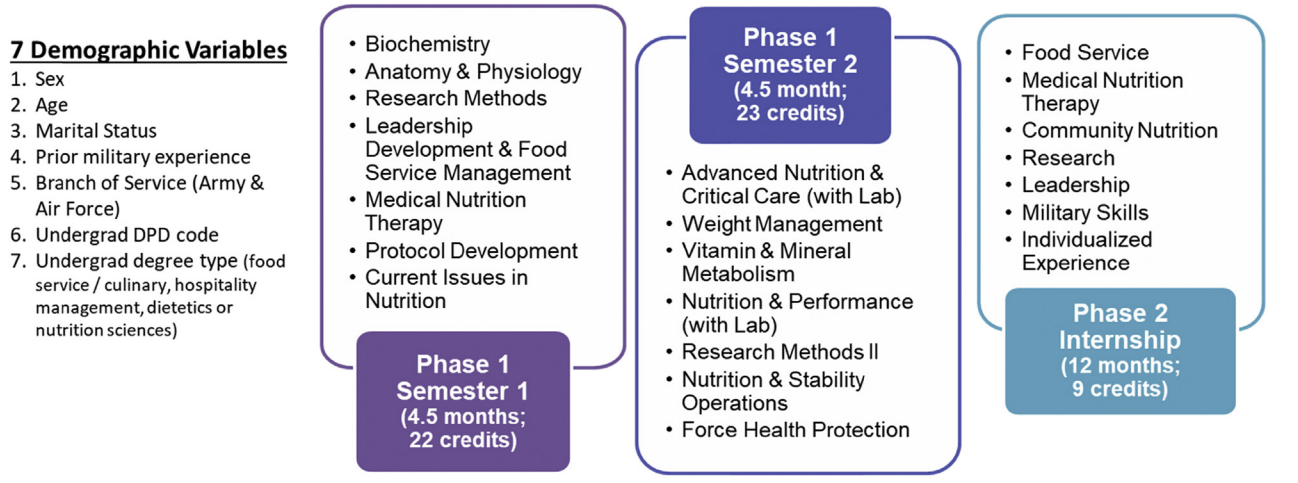

Figure. Graduate Program in Nutrition (GPN) curriculum and independent variables collected from student program files and used for data analysis.