

Slicing and Dicing Nutrition, Disease and Health Disparities

Purpose

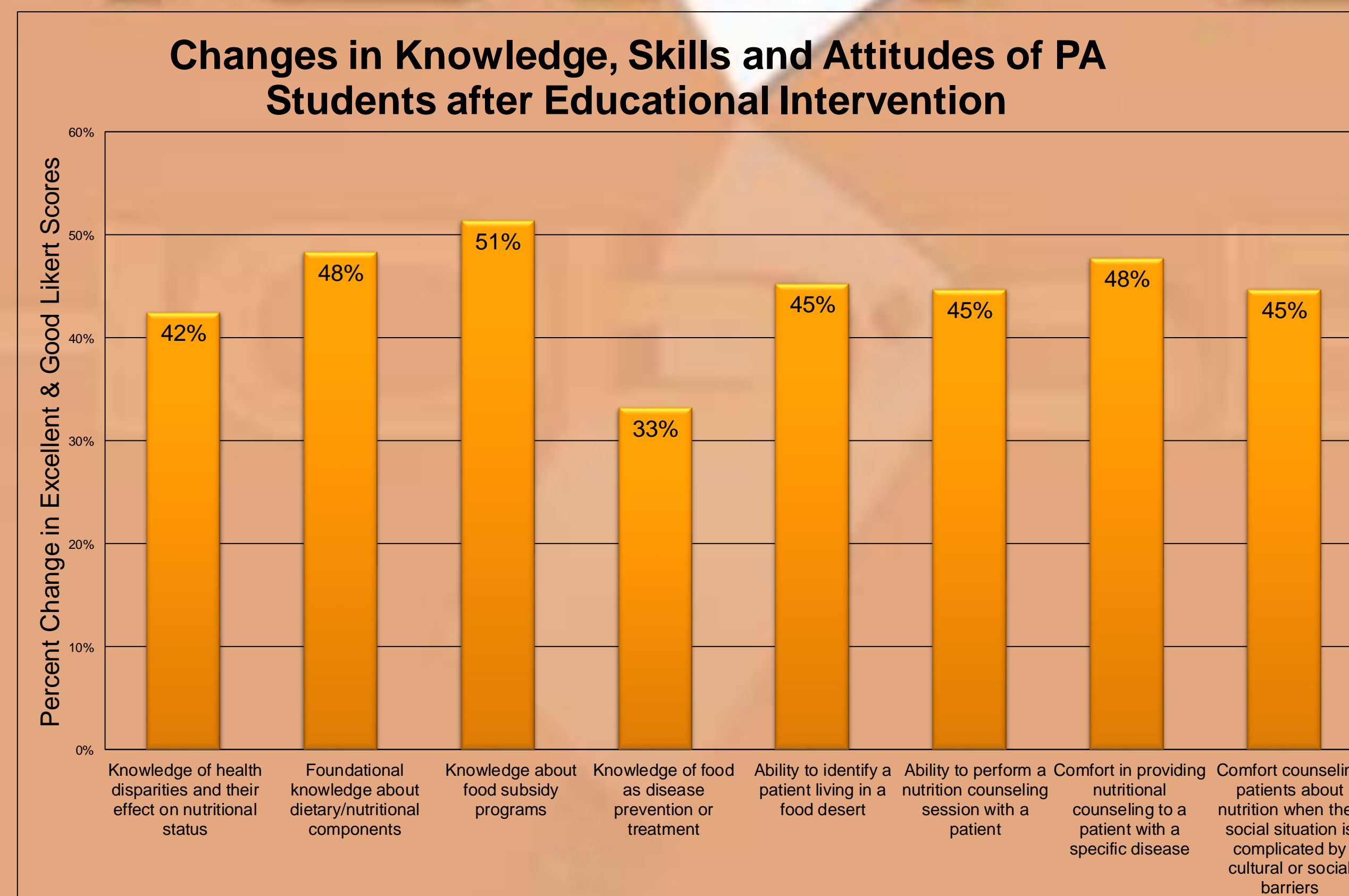
- Despite the fact that both nutrition and social determinants of health are key concepts that PA programs must address, only 40% of PA programs integrate the concepts of food access and culturally competent nutritional advice.¹
- Of practicing PAs, 91% feel that physician assistant (PA) programs should place a greater emphasis on nutrition education.²
- Studies have shown that students and practicing PAs feel dissatisfied with their current nutrition knowledge and/or unprepared to discuss nutritional concepts with patients,^{1,3} particularly when barriers such as social determinants of health (SDoH) complicate care.
- To demonstrate the complex relationship between health disparities and nutritional habits, we established a learning activity integrating SDoH concepts and nutrition principles, with an overall aim of improving students' knowledge, skills, and comfort in working with complex social or cultural medical situations requiring nutritional interventions.

Methods

- During AY21-22, all second-year didactic PA students received classroom instruction on the effects of health disparities on nutritional status, food subsidy programs, and vulnerable populations prior to engaging in the experiential learning project.
- Self-selected groups randomly drew an address in a known food desert, household demographics, a cultural/ethnic consideration, and a medical diagnosis amenable to nutritional interventions.
- Students analyzed the patient's neighborhood considering environmental, transportation, housing and food resources; designed a culturally and medically appropriate recipe using the financial constraint of \$10/meal; presented a summary of the project to peers; and wrote a short reflection about the project.
- Students completed a retrospective pre-/post-survey using a 5-point Likert scale.

Results

- Thirty-three (33) out of 44 students voluntarily participated in the survey (75% response rate); however, 2 participants were removed secondary to missing data.
- Using a Wilcoxon signed rank test ($\alpha=0.05$), responses were analyzed. All 8 areas had statistically significant improvements.
- On average, there was a 45% improvement with the intervention across all domains.



Conclusions

- While nutrition counseling, especially when accounting for social or cultural factors, is initially intimidating for PA students, we found that by offering students an experiential learning project that combined these factors, measurable improvements in knowledge, skills and comfort could be attained.
- Only recently have the concepts of lifestyle medicine, a subspecialty of preventive medicine, become a graduation competency that PA programs strive to provide to aspiring clinicians.
- New-graduate competencies for the profession include providing counseling and health promotion for patients and their families aimed at preventing disease and injury.³
- Additionally, educating budding clinicians about the role social determinants of health play in health disparities is an ARC-PA requirement (B2.06).⁴
- The length of most PA training programs and accreditation requirements places barriers on adding new content. This innovative curricular intervention would allow programs to combine concepts and affect deep learning of both the content topics.

References

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4. ARC-PA, Inc. Accreditation Manual for Entry Level Physician Assistant Program. 5th ed. 2021 July; p 36.