

Abstract

PURPOSE: This study aimed to determine current satisfaction with the nutrition curriculum offered to students at Touro University Nevada, College of Osteopathic Medicine (TUNCOM) and assess interest in and the feasibility of an elective comprised of clinical nutrition supplemented with culinary medicine workshops as a means to fill this potential gap in the curriculum.

METHODS: The study design consisted of two surveys, one for the first and second-year cohorts (n=310) and one for the third and fourth-year cohorts (n=240). Results were utilized to create a pilot course consisting of online clinical nutrition educational material and two culinary medicine sessions. After the completion of the two pilot sessions, a survey was sent to all participants (n=16) to evaluate the pilot course.

RESULTS: First and second-year students agreed that nutrition counseling is an important component of patient care and that physicians are not adequately trained in nutrition. Third and fourth-year students indicated that they should have had more time devoted to nutrition and that they do not currently feel prepared to counsel patients regarding nutrition-linked diseases.

Overall, 84% of students reported being interested in the proposed elective. The most popular method of instruction depended on the year of the student, preclinical year students preferred the in-class setting, third-year students preferred online lectures and fourth-year students preferred online PowerPoints. All levels of students preferred the culinary sessions to occur once every two weeks.

CONCLUSIONS: The results of the surveys demonstrated that students view nutrition counseling as an important component of patient care, but currently feel unprepared and are not satisfied with the nutrition curriculum offered at TUNCOM. Students are very interested in a clinical nutrition with culinary medicine workshops elective. The overall results of the surveys and the success of the pilot sessions strongly demonstrate the need for the proposed elective.

BACKGROUND

- Dietary factors have been identified as the single most significant risk factor for disability and premature death in the U.S.
- Osteopathic Medicine uses a whole-person approach to focus on disease prevention, recognizing how lifestyle and environmental factors can impact wellbeing.
- Traditional medical curricula (Osteopathic and Allopathic) designate little to no time in training future physicians in clinical nutrition and lifestyle counseling.
- However, physicians are expected to be competent at managing and counseling patients on nutrition-linked diseases such as obesity, diabetes, metabolic syndrome, hospital malnutrition, etc.
- Culinary medicine is a new evidence-based field that blends the art of food and cooking with the science of medicine.

OBJECTIVES

1. Using the survey results as a needs assessment, to determine the best method of teaching an elective of clinical nutrition supplemented by Culinary Medicine workshops
2. Determine whether the limited hours of theoretical teaching of nutrition for the third and fourth year students was enough to give them confidence regarding patients' education about the fundamentals of healthy eating
3. Offer a pilot session of clinical nutrition supplemented by culinary medicine workshops targeting a specific nutrition linked-disease such as cardiovascular disease to the first 16 responders, conducted by a local chef, in order to determine the feasibility and effectiveness of this method of teaching the basics of food selection and preparation.

RESULTS

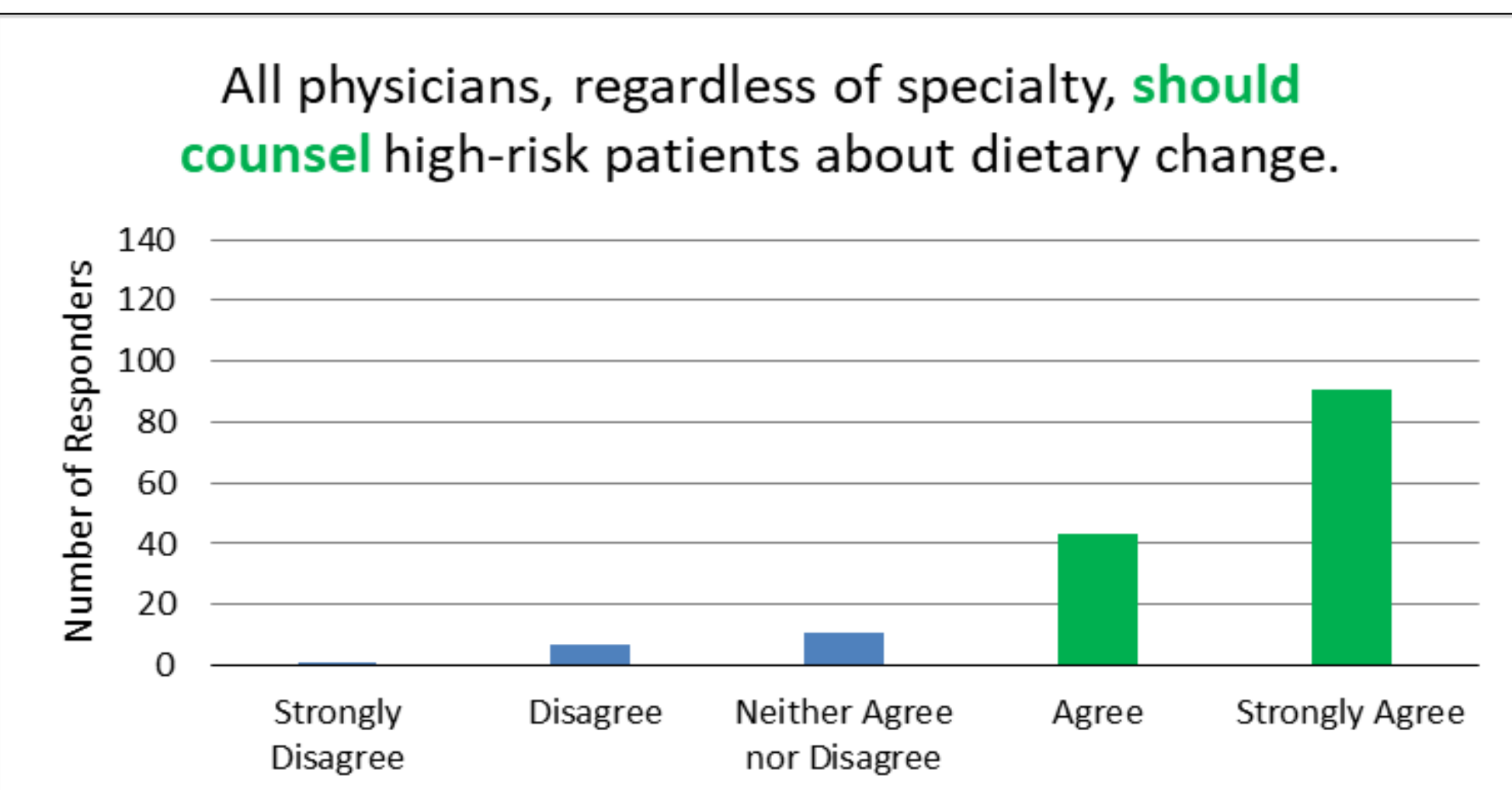


Figure 1: The vast majority (88%) of students surveyed agreed or strongly agreed that dietary counseling should be a component of the patient-physician interaction, regardless of specialty.

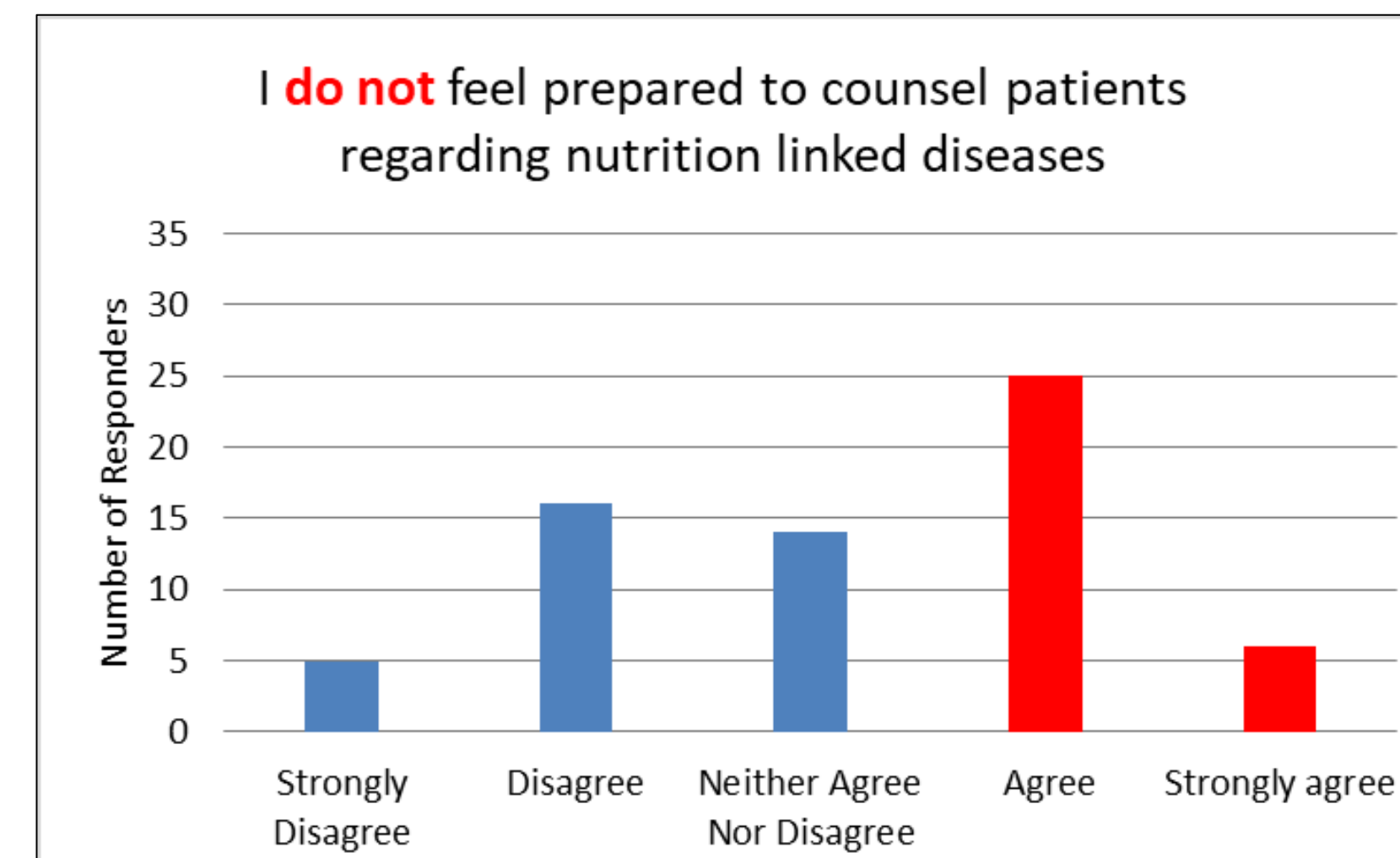


Figure 2: 47% of students surveyed either agreed or strongly agreed that they do not feel prepared to counsel future patients on nutrition.

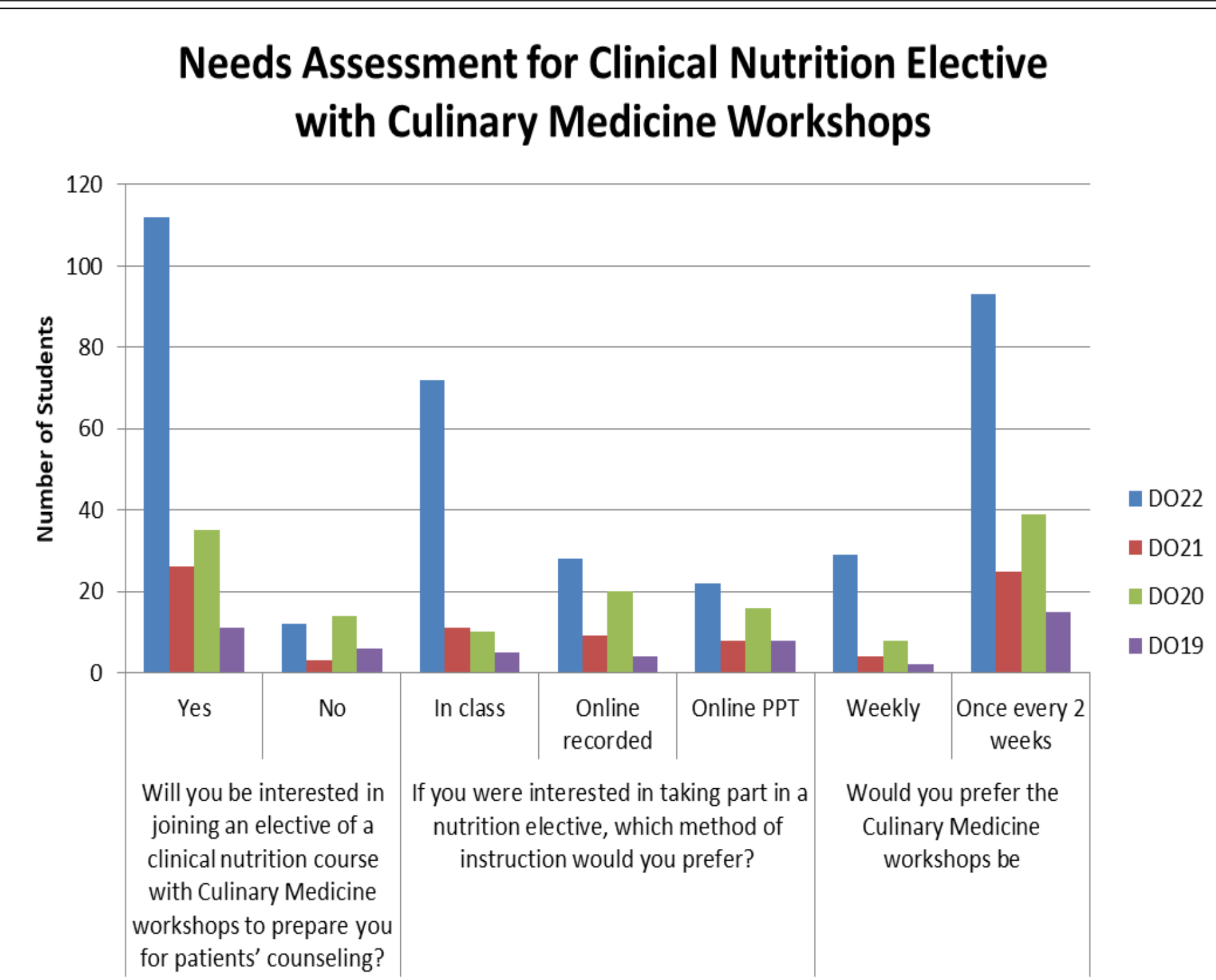


Figure 3: 84% of students surveyed reported being interested in taking part of the proposed elective. In regards to the delivery of the clinical nutrition instruction part of the proposed elective, 46% of students surveyed preferred in class instruction, 29% preferred online recorded lectures, and 25% preferred online PowerPoints. To make it available to all cohorts, online instruction was preferred. The majority (80%) of students preferred the Culinary Medicine workshop portion to be every other week.

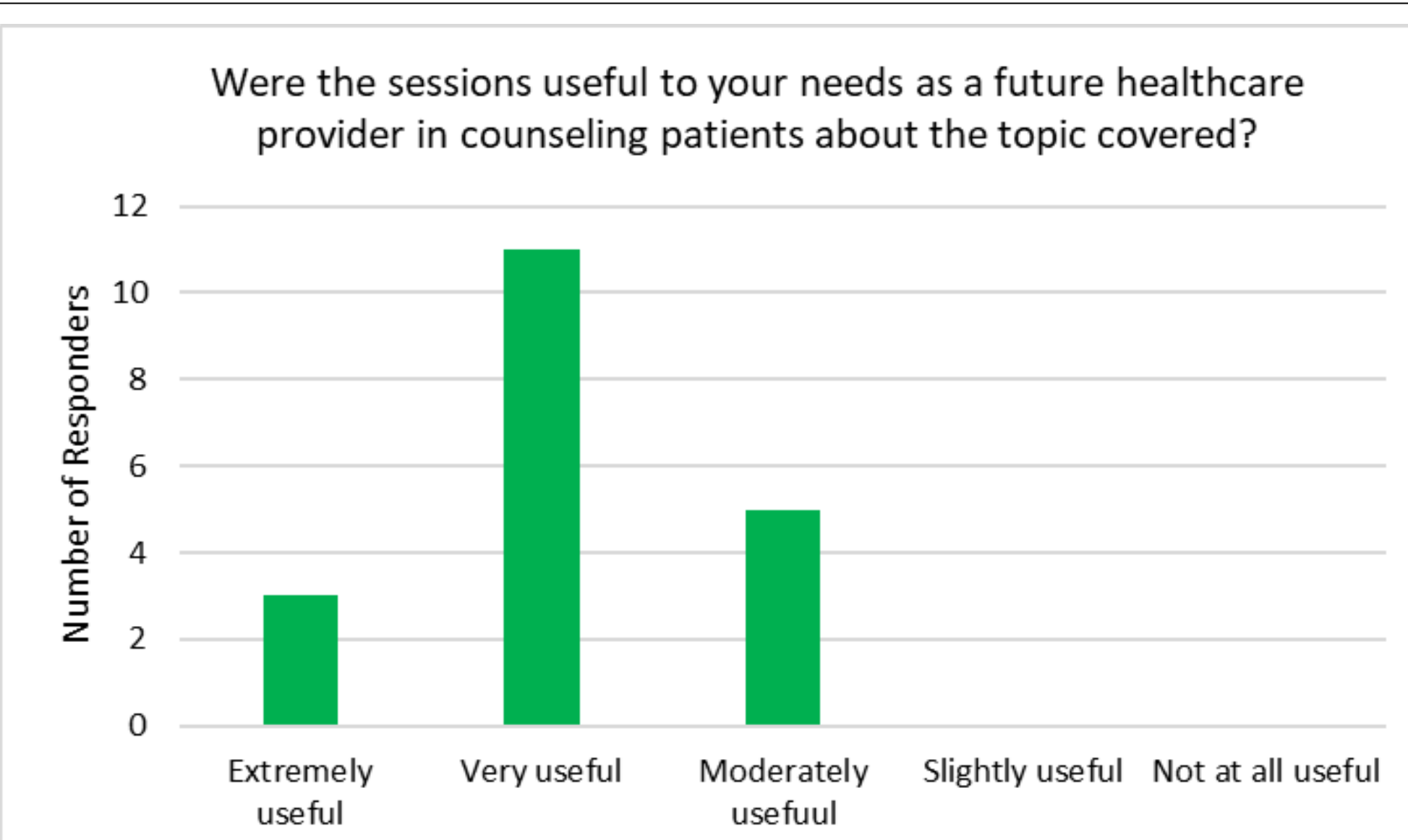
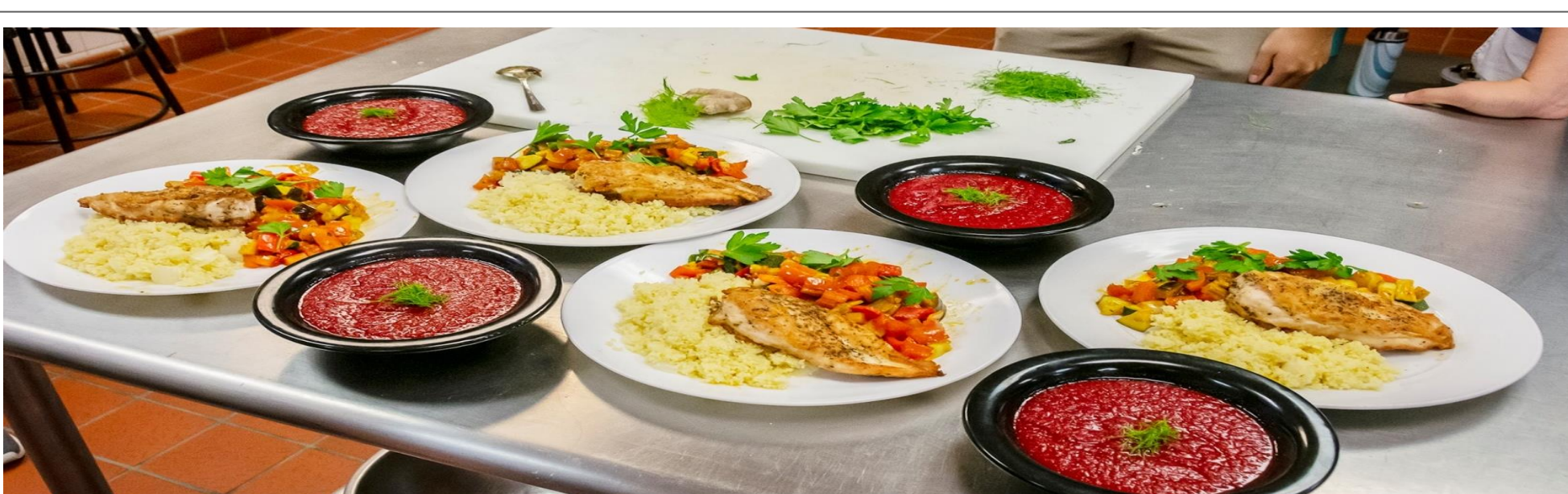


Figure 4: Almost 80% of students who participated in the pilot sessions deemed them useful for the needs as future health providers.



Workshop 1: The first Culinary Medicine session was dedicated to learning food safety and knife skills



Workshop 2: Focused on preparing food for a patient who is on a sodium and fat restricted diet

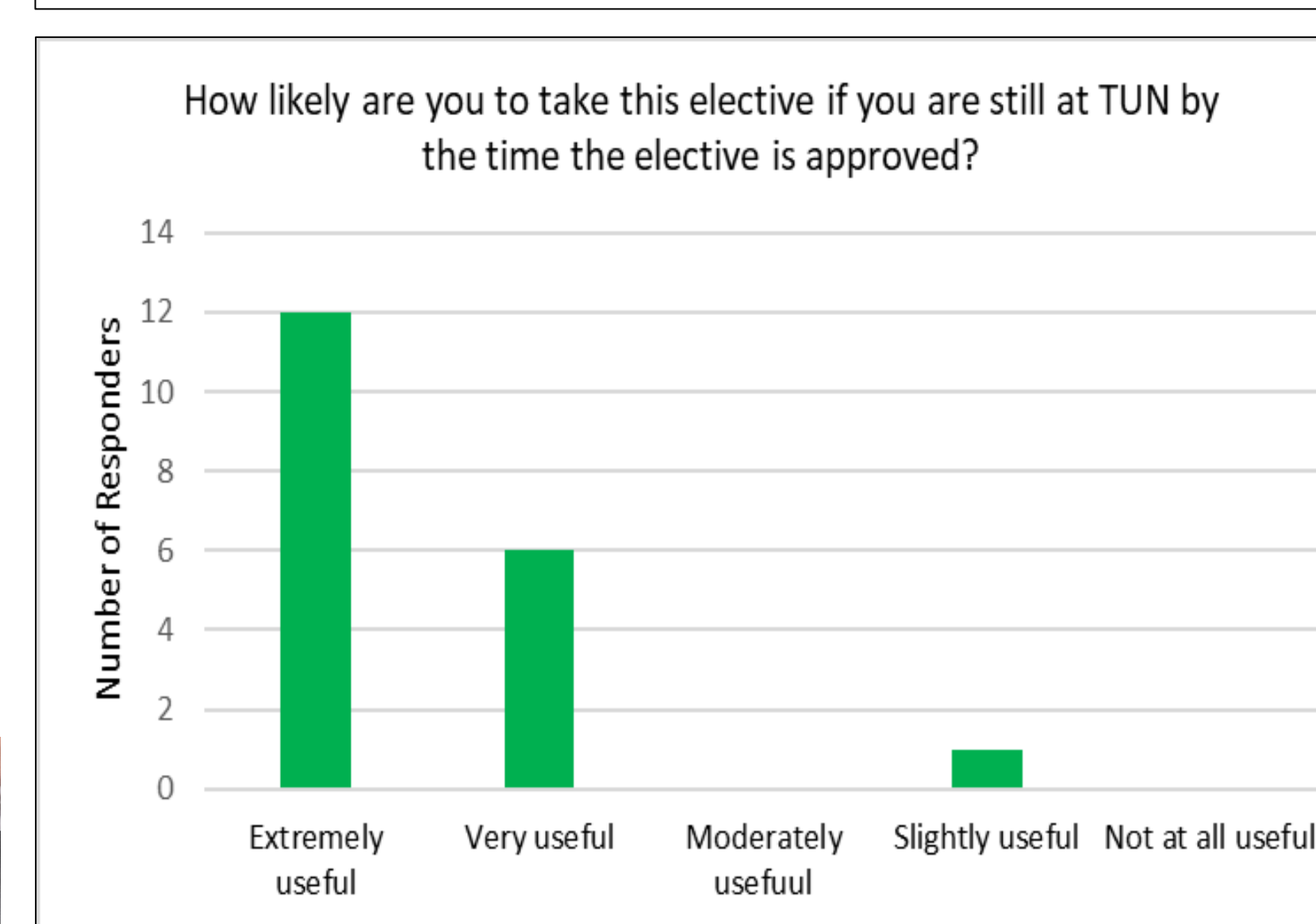


Figure 5: Almost 90% of the students who participated in the pilot sessions are likely to take the elective if approved.

METHODS

Needs Assessment Survey:

- A previously validated survey instrument was used to create two survey questionnaires, one for the first and second year students (n=310) and another for the third and fourth year students (n=240)
- The first and second year cohort survey focused on perceived relevance of nutrition in disease prevention, interest in the proposed elective and content delivery preferences of the elective
- The third and fourth year cohort survey also addressed interest in the elective as well as their feelings of preparedness to counsel future patients regarding lifestyle changes
- Survey was sent to all TUNCOM students via SurveyMonkey. Responses were collected and deidentified. Statistical analyses were performed in Rv3.5.1

Pilot Elective Sessions:

- The first 16 student responders, with equal representation among cohorts, participated in a pilot comprised of an online unit on coronary vascular disease and two culinary medicine sessions
- The didactic portion consisted of 1. PPT on coronary artery disease causes and nutritional preventive measures, 2. word document about patient counseling prepared by a certified nutritionist and 3. an assessment in the form of two clinical cases with essay answers
- The first culinary workshop focused on knife skills and food safety
- The second session was focused on preparing food for a patient who is on a sodium and fat restricted diet

Post-Workshop Survey:

- An additional survey was created to assess student feedback on the pilot elective
- The survey was emailed to all participants via SurveyMonkey to complete. Responses were collected and deidentified.

DISCUSSION/CONCLUSIONS

- The first and second year students both strongly agreed that preventative health, in particular nutrition counseling, is an important aspect of the patient-physician encounter.
- Third and fourth year students felt equally unprepared to counsel future patients regarding nutrition and lifestyle changes due to very little nutrition training in the prior curriculum.
- As planned, an elective of Clinical Nutrition complemented with Culinary Medicine workshops is deemed necessary by medical students and more than 80% of students who experience the pilot sessions would complete it if it is offered by the school

ACKNOWLEDGEMENTS

- IAMSE/ScholarRx Student Research Grant obtained by Lindsey Leggett, DO21
- Chef Vietmeier, Dean of The Art Institute of Las Vegas for agreeing to host and teach the two pilot Culinary Medicine sessions.



CONTACT & REFERENCES



References available upon request.