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## Poster Session: Late-Breaking Research Abstracts

### Nutritional Quality in Long Term Care Using Nursing Home Compare Data Set for the State of Indiana

**Author(s):** H. Pfrank, M. Hutchins, A. Wotring; Indiana State University

**Learning Outcome:** Discuss how accurately the Star Ratings system reflects nutritional quality in long-term care facilities.

**Background:** Quality of long-term care received by nursing home residents remains a persistent concern for consumers and their families. Since the 1987 nursing home reform act, continuous efforts have been made to establish a national system for assessing, monitoring, and publicly reporting nursing home quality. Making facility performance data available is expected to empower and stimulate quality improvements. Because positive health outcomes are enhanced by quality food and nutrition programs there is a growing focus placed on improving food intake for residents of long-term care.

**Methods:** This study analyzed data from Nursing Home Compare web site for 2019. This correlational descriptive study focused on food and nutrition health deficiencies, long term quality measure of weight loss and star ratings. Correlations among quality measure of weight loss, reported nutrition deficiencies, star ratings and bed size were analyzed. Multiple linear regression tests were utilized to predict whether nutrition deficiencies predicted star components to nutrition deficiencies. Chi square was utilized to evaluate overall star rating to reported nutrition deficiencies.

**Results:** Total number of nutrition/food deficiencies was correlated to weight loss percentage ( $r = .093, p = .031$ ). Star rating components and overall star rating were not found to be significant to number of nutritional deficiencies. The analysis of facility bed size to residents who lose too much weight, no significance was found.

**Conclusion:** Public reporting to improve quality measures can have an impact on care by increasing awareness of quality differences and development of user-friendly reports that focus on specific areas of quality.

**Funding source:** None

### Online Teaching Self-Efficacy and Teaching Satisfaction in Nutrition and Dietetics During COVID-19

**Author(s):** M. McInerney, S. Pritchard; Rush University

**Learning Outcome:** Identify the relationship between online teaching self-efficacy and online teaching satisfaction during COVID-19 in nutrition and dietetics education.

**Background:** There are 594 accredited dietetics programs in the United States, only 31 (5.2%) offer a distance/online education option. The COVID-19 pandemic during the Spring and Fall 2020 terms required in-person dietetic education to transition to online formats. Research outcome: To determine if online teaching self-efficacy and perceived stress had a significant effect on online teaching satisfaction in nutrition and dietetics education during COVID-19.

**Methods:** The validated Michigan Nurse Educator's Sense of Efficacy for Online Teaching, Perceived Stress Scale, and Online Instructor Satisfaction Survey were used for data collection. Spearman rho was used to identify relationships between scale scores. Multiple regression was used to predict online teaching satisfaction based on online teaching self-efficacy and perceived stress scores.

**Results:** High levels of online teaching self-efficacy were associated with higher levels of online teaching satisfaction ( $r_s = .76, n = 68, p < .001$ ); high levels of teaching satisfaction were associated with lower levels of perceived stress ( $r_s = -.52, n = 68, p < .001$ ); and high levels of online teaching self-efficacy were associated with lower levels of perceived stress ( $r_s = -.59, n = 68, p < .001$ ). Online teaching self-efficacy score was a significant predictor of online teaching satisfaction scores ( $B = 2.36, p < .001$ ).

**Conclusions:** Increasing nutrition and dietetic educators' online teaching self-efficacy will increase their online teaching satisfaction. As teaching modalities change due to unforeseen circumstances, such as the COVID-19 pandemic, best practices for online teaching in nutrition and dietetics need to be further developed.

**Funding source:** None

### Pandemic Fatigue: Burnout Among Nutrition and Dietetics Program Directors

**Author(s):** H. Frazier<sup>1</sup>, P. Grace Farfaglia<sup>2</sup>; <sup>1</sup>University of the Incarnate Word, <sup>2</sup>Sacred Heart University

**Learning Outcome:** Describe burnout in program directors of ACEND-accredited Registered Dietitian Nutritionist (RDN) programs.

**Objective:** To understand if burnout affects dietetic program directors in order to determine if action is needed to prevent burnout.

**Methods:** A quantitative, cross-sectional survey was conducted from January until February 2021 using the validated data collection instrument Maslach Burnout Inventory (MBI) – Educators Survey. An e-mail was sent to current program directors of ACEND-accredited RDN programs with a link to the online Qualtrics survey.

**Results:** In total, 212 program directors completed the survey giving a 40.3% response rate. Majority were 50 years of age or younger (54.7%) and female (91.5%). Most program directors had high emotional exhaustion (59.4%), moderate depersonalization (38.7%), and moderate personal accomplishment (42.0%). Overall, being a program director at any rank was found to be positively correlated with emotional exhaustion ( $r = 0.91, p < 0.001$ ) and depersonalization ( $r = 0.66, p < 0.001$ ), but not personal accomplishment ( $r = 0.03, p = 0.651$ ). One hundred and four program directors (49.3%) considered resigning in the last year and 120 (56.9%) have considered leaving their position in the next 5 years.

**Conclusion:** Program directors were found to have moderate burnout. Regardless of rank, program directors feel emotionally exhausted while still having a sense of personal accomplishment. Further investigation is warranted to study burnout in program directors over time, as well as explore the potential effect on dietetics programs.

**Funding source:** Faculty Endowment Research Award from the University of the Incarnate Word Office of Research and Graduate Studies.

### Pandemic Teaching: Use of Virtual Reality Apps to Teach the Anatomic Basis for Muscle Assessment in Nutrition Focused Physical Exam

**Author:** E. Emery; La Salle University

**Learning Outcome:** Identify virtual reality technologies that can be used in remote teaching and learning for dietetic interns.

**Background:** The COVID-19 pandemic affected teaching and learning globally. Creative solutions were needed to address experiential learning needs during remote instruction and supervised practice in dietetics. Virtual reality (VR) has been adopted for teaching anatomy in many health professions. In dietetics, immersive VR using head-mounted displays can be used to increase knowledge of anatomy and confidence in performing muscle assessment during Nutrition-Focused Physical Exam (NFPE)<sup>1</sup>. This pilot study was conducted to evaluate the effectiveness of a virtual and augmented reality (AR) mobile app to allow remote study of anatomy for NFPE.

**Methods:** Eight dietetic interns received remote synchronous instruction using 3D VR images of the muscles assessed during NFPE followed by self-study using a phone-based VR/AR anatomy app. An anatomy quiz was administered before and after instruction and an anonymous satisfaction survey was sent after the self-study period.

**Results:** A Wilcoxon signed-rank test revealed a significant change in knowledge following the instructional session,  $Z = -2.53, p = 0.01$ , with the median pre-test score 55.0% and median post-test score 90.0%. Survey results revealed students found the online session to be engaging, helpful for visualizing muscles, and stimulating. Independent use of VR and AR were also well-received, although there was a learning curve to use the app and students commented that they did not prefer to learn on their phones with small screens. Overall, students found the activity to be a helpful supplement to live practical experience learning NFPE.

**Conclusion:** VR and AR anatomy apps can be used remotely to supplement live NFPE instruction.

**Funding source:** A free 30-day trial of the Visible Body Atlas app was provided for student use by Visible Body, Natick, MA