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Advanced Practice Nursing student knowledge in obesity management: A mixed methods research study

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ABSTRACT

Background: Obesity, the most prevalent chronic disease affecting multiple systems, is associated with increased mortality and a decreased life expectancy.
Objectives: The purpose of this study was to identify Advanced Practice Nursing (APN) students' confidence of obesity management as well as satisfaction of APN curriculum on and curricular recommendations regarding obesity management.
Design: Modified convergent mixed-methods design.
Setting: A university-based college of nursing in the Deep South.
Participants: Graduate APN Students.
Methods: An exploratory mixed methods online survey was administered to APN students. The survey included demographics; confidence in obesity management; knowledge of pharmacological treatment; self-reported height and weight; experiences and challenges related to obesity management; and suggestions of curricular content changes for the treatment of obesity that would increase student expertise and confidence.
Results: Ninety-nine surveys were completed by 94 female and five male APN students aged 26 to 61 years. The majority (70.7%) were white with BMIs ranging from 19.57 to 51.37 ($\bar{x}$ = 27.81). Areas where students were least comfortable were prescribing anti-obesity medications and accurately billing for obesity management. Fourteen percent of APN students reported feeling that their graduate nursing education program did not prepare them well in obesity management, 25.3% reported feeling slightly well prepared, 32% reported feeling moderately well prepared, and 27.8% reported feeling very well or extremely well prepared. Qualitative responses accentuated insecurity in areas such as initiating a discussion on obesity management with patients who have obesity.
Conclusions: Overall, APN students requested that their curriculum incorporate more instruction on how to begin the discussion of weight loss and provide clear evidence-based guidelines that include diet, exercise, and medication options. An efficient way to affect the management and treatment of obesity is to ensure that the next generation of providers is thoroughly prepared to implement the best evidence-based obesity management for patients.

1. Introduction

In the U.S., overweight and obesity have increased to epidemic magnitudes (Yang and Colditz, 2015) and are among the most significant health issues facing patients and healthcare providers today (Leey and Cusi, 2018). At least two out of three Americans have overweight or obesity (Centers for Disease Control and Prevention, 2017), and approximately 38% of adult men and 42% of adult women in the U.S. have obesity (Hales et al., 2017). Individuals with obesity may experience a notable increase in morbidity and mortality and a possible reduction in life expectancy of 5 to 10 years as obesity affects multiple systems (Dobbins et al., 2013; Gonzalez et al., 2010; Kuk et al.,

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2011). It is essential for healthcare providers to be well prepared to care for patients using an evidence-based treatment of obesity (American Nurse Practitioner Foundation, 2013).

2. Background

The American Association of Clinical Endocrinologists and American College of Endocrinology have recognized the substantial public health hazard obesity poses, so, together, these two professional organizations have developed an evidence-based clinical practice guideline to support healthcare providers with direction on the appropriate treatment of the diseases of overweight and obesity (Garvey et al., 2016). These guidelines provide an algorithm that includes educating and screening all patients; staging of the disease if the screen is positive; and recommending treatments that include lifestyle modification, behavioral therapy, pharmacologic therapy, and bariatric surgery. Determination of treatment is dependent on disease stage and presence of comorbid conditions (Garvey et al., 2016). The recommendations of pharmacological therapy to combat obesity are echoed by The Endocrine Society, which composed a clinical practice guideline focused primarily on anti-obesity medications (Apovian et al., 2015).

Healthcare providers, including nurse practitioners (NPs), family physicians, obstetrician/gynecologists, and internists have reported that more training, clinic time, resources, and reimbursement are needed for them to effectively treat patients with obesity (Petrin et al., 2016). Similarly, Brown et al. (2007) found that healthcare providers reported they do not feel confident in counseling individuals regarding weight-loss and view this as an obstacle to obesity management, yet limited evidence exists for effective obesity education in medical training programs (Vitolins et al., 2012).

Counseling confidence is a factor in providers' ability to guide patients in management of overweight and obesity. Bleich et al. (2015) found a gap between nurses' levels of confidence and their self-reported success in helping patients achieve personal weight-management goals.

Factors that may impact the confidence of the healthcare provider to manage obesity effectively are the provider's own body mass index (BMI; Bleich et al., 2012). Physicians ($N = 498$) with a BMI in the overweight or obese categories ($n = 230$) were less likely to initiate a discussion regarding weight management with patients having obesity. This group of physicians with a BMI in the overweight or obese categories also had less confidence counseling patients with obesity on dietary and exercise recommendations.

One way to increase the number of providers who are competent in obesity management is to prepare the next generation through enhanced curriculum within advanced practice programs (American Nurse Practitioner Foundation, 2013; Keyworth et al., 2012). In turn, promotion of the self-efficacy of an Advanced Practice Nursing (APN) student may be realized through appropriate obesity-management education.

The purpose of this study was to 1) identify APN students' comfort and knowledge of providing care to patients with obesity, 2) ascertain student satisfaction with existing education, and 3) obtain curricular suggestions regarding obesity management. Additionally, this study offered opportunities for APN students to describe difficulties as well as positive experiences when managing obesity in the clinical setting.

3. Methods

A modified convergent mixed-methods design was employed for this study to gain a contextual understanding of the comfort level of APN students in treating patients who have obesity and to discover methods to address potential challenges. An online survey was developed by the researchers and administered to APN students from a university in the Deep South to be administered via Qualtrics, the university-sponsored on-line survey/questionnaire platform.

This university enrolls graduate students from across the U.S. Information was obtained regarding the following: a) demographics: gender, age, race, APN program (Master of Science in Nursing [MSN] vs. Doctor of Nursing Practice [DNP]) and specialty (e.g., Family NP vs. Adult-gerontological Clinical Nurse Specialist [CNS]), and self-reported height and weight to calculate respondent BMI; b) confidence in using best practices in obesity management; c) pharmacological treatment-specific knowledge of anti-obesity medications; d) challenges and successful strategies related to obesity management; and e) perceived adequacy of preparation through their graduate education to confidently manage patients with obesity. The survey also provided an opportunity for students to suggest specific content to be included in the APN graduate curriculum that would further increase student expertise and confidence with obesity management. National experts reviewed the survey. Before the onset of this project, approval was obtained through the Institutional Review Board.

A link to access the Qualtrics survey was distributed via email to the 2588 MSN and DNP students enrolled in the CNS and all NP specialties except the Neonatal NP specialty. Institutional Review Board approval documentation was included, and the email stated that completion of the survey indicated voluntary, anonymous consent for participation. Survey responses autopopulated into Qualtrics upon submission by the participant, and data were imported into and analyzed by IBM SPSS Version 24. Statistical measures used for analysis included descriptive data and correlations between variables. Qualitative data were reviewed by two individual researchers independently who categorized responses into themes. The two researchers then collaborated on their results and discussed disparities between their themes in an attempt to reach consensus. For those themes where consensus was not achieved, a third researcher participated in breaking the tie.

The following research questions guided this study: 1) Are APN students comfortable with the overall management of patients with obesity? 2) Based on national guidelines, at which numeric BMI level would a healthcare provider initiate therapy with anti-obesity medications? 3) Does the BMI of the APN student influence the level of comfort addressing obesity-management issues with his/her patients? 4) How thoroughly did the APN students feel they had been prepared to provide obesity management during their graduate nursing education?

3.1. Measures

The APN students' comfort with managing a patient with obesity was assessed with nine questions using a Likert-type scale with the following anchors: 1) Extremely Comfortable, 2) Comfortable, 3) Neither Comfortable or Uncomfortable, 4) Uncomfortable, and 5) Extremely Uncomfortable. Questions were related to the following activities: prescribing anti-obesity medication, educating on lifestyle modifications, billing for visits, assessing the ability to exercise safely, prescribing an activity plan and dietary plan, initiating a conversation about obesity, and using a diagnosis code for obesity. Cronbach's alpha for this assessment tool was 0.871. A question was included to assess APN students' knowledge related to current national guidelines for appropriate initiation of anti-obesity medications according to patient BMI and comorbidities or complications from obesity. The three final qualitative questions were open-ended to gather successful strategies and challenges related to obesity management and ways to improve obesity management for future healthcare providers. The questions were: 1) What recommendations could be incorporated in a graduate program of study to increase confidence and proficiency related to obesity management? 2) What is the greatest challenge with obesity management? 3) Illustrate some positive approaches that you have employed related to treating patients with obesity.

4. Results

Advanced Practice Nursing students enrolled in a college of nursing

Table 1
Response rate in each advanced practice nurse graduate program.

	Master of Science in Nursing	Doctor of Nursing Practice	Total
	Number responses/number enrolled(response rate)		
Adult-Gerontological Acute Care NP	4/155(2.6%)	1/118(0.9%)	5/273(1.8%)
Adult-Gerontological Primary Care NP	5/95(5.3%)	5/69(7.3%)	10/164(6.1%)
Adult-Gerontological CNS	0/25	0/18	0/43
Dual Role (Family/Adult-Gerontological Acute Care) NP	9/251(3.6%)	10/204(4.9%)	19/455(4.2%)
Family NP	20/551(3.6%)	17/298(5.7%)	37/849(4.4%)
Pediatric Acute Care NP	2/60(3.3%)	3/37(8.1%)	5/97(5.2%)
Pediatric Primary Care NP	4/109(3.7%)	2/45(4.4%)	6/154(3.9%)
Psychiatric (Family) NP	9/276(3.3%)	2/159(1.3%)	11/435(2.5%)
Women's Health NP	4/79(5.1%)	2/39(5.1%)	6/118(5.1%)
Total students	57/1601(3.6%)	42/987(4.3%)	99/2588(3.8%)

Note: nurse practitioner (NP), Clinical Nurse Specialist (CNS).

at a university in the Deep South completed the online survey ($N = 99$). Ninety-four participants were female, and five were male. Ages ranged from 26 to 61 years ($\bar{x} = 38.32$, $SD = 9.03$). Most respondents identified as white (70.7%) followed by black/African American (17.2%) and Asian (8.1%). Respondents were enrolled in both the MSN ($n = 57$; 57.6%) and DNP ($n = 42$; 42.4%) programs. See Table 1 for response rates and distribution of participants in APN programs and specialties.

Respondent BMI was calculated by self-reported height and weight revealing a mean BMI of 27.81 ($SD = 6.45$), ranging from 19.57 to 51.37. Categories of BMI for adults over age 19, as identified by the World Health Organization (2018), are the following: underweight < 18.5, normal weight = 18.5–24.9, overweight = 25–29.9, obese 1 = 30–34.9, obese 2 = 35–39.9, and obese 3 ≥ 40. When evaluating participant BMI by the World Health Organization categories, there were 43.9% of students in the normal weight category, 20.4% in the overweight category, and 35.7% in the categories of obese 1, obese 2, and obese 3.

4.1. Quantitative results

4.1.1. Comfort level with aspects of obesity management

The following reports include the median scores of self-reported comfort with various aspects of obesity management on a 5-point scale, with increasing values indicating less comfort: managing patients with obesity (*median* = 2), prescribing anti-obesity medications (*median* = 3), educating patients with lifestyle modifications (*median* = 2), accurately billing for obesity management visits (*median* = 3), assessing a patient's ability to safely participate in exercise (*median* = 2), prescribing an activity plan (*median* = 2), prescribing a dietary management plan (*median* = 2), initiating a conversation about obesity management (*median* = 2), and diagnosing patients with an obesity-related diagnosis code (e.g., ICD-10; *median* = 2). See Table 2 for details of comfort level results related to aspects of managing obesity.

4.1.2. The current level of knowledge regarding national guidelines for anti-obesity medication management

The APN students were asked the following question: "Based on current National Guidelines, in which two of the following scenarios would it be appropriate to initiate therapy with anti-obesity medications? (Select the two that apply)." The correct answers based on The Endocrine Society pharmacological management guidelines (Apovian et al., 2015) were: 1) a BMI of 30 with no obesity-related comorbidities/complications (selected by 72.4% of participants), and 2) a BMI of 27 with one or more obesity-related comorbidities/complications (selected by 49.5%). Incorrect answers were: 1) a BMI of 26 with two obesity-related comorbidities/complications (selected by 52.1%), and 2) a BMI of 28 with no obesity-related comorbidities/complications (selected by 49.5%).

4.1.3. An evaluation of preparation regarding obesity management during graduate nursing education

Students reported that their graduate nursing education prepared them to manage obesity not well at all (14.4%), slightly well (25.8%), moderately well (32%), and very well or extremely well (27.8%). Students were questioned to list the six anti-obesity medications approved by the Federal Drug Administration. None of the respondents were able to list all of these medications.

4.1.4. Relationship of provider BMI to comfort level with obesity management

When examining correlational analysis, there were no significant relationships between APN-student BMI category and level of comfort in educating patients on lifestyle modifications, billing for visits, assessing the ability to exercise safely, prescribing an activity plan and dietary plan, initiating a conversation about obesity, or using a diagnosis code for obesity.

Table 2
Comfort level with patient obesity management.

Aspect of obesity-management	Extremely comfortable	Comfortable	Neither	Uncomfortable	Extremely uncomfortable
	%	%	%	%	%
Managing obesity	13.1	59.6	22.2	5.1	0
Prescribing anti-obesity medications	4.0	27.3	34.3	29.3	5.1
Lifestyle modifications	36.4	56.6	5.1	2.0	0
Accurate billing	6.1	29.3	33.3	27.3	4.0
Assess ability to exercise safely	12.1	57.6	16.2	14.1	0
Activity plan	15.2	56.6	19.2	8.1	1.0
Dietary plan	17.3	52.0	17.3	12.2	1.0
The conversation about obesity management	23.5	56.1	9.2	10.2	1.0
Diagnosis with an obesity ICD-10 code	27.6	37.8	18.4	15.3	1.0

Table 3
Themes for open-ended Question #1 with supporting statements.

What could be included in a graduate or undergraduate curriculum to increase your expertise and confidence in obesity management?
Offer education on specific aspects of obesity management
• "Focus on evidence-based diets with a variety of options to meet individualized needs."
• "I have attended CE courses where each 'diet' or dietary lifestyle was reviewed for effectiveness, but it focused on adult lifestyles rather than pediatric…"
• "Clear instruction on evidence-based medication options."
• "Clinical time in bariatric facilities or outpatient weight management programs."
• "Dietary management."
• "Discuss pharmaceutical obesity treatment."
• "Discuss psychological component of obesity counseling."
• "How exercise programs can be tailored based on age, health, and nutritional education."
• "Nutrition and exercise planning for specific populations."
• "Cognitive behavioral therapy training and classes on motivational interviewing."
• "Nutrition education, how to set caloric goals and different diet options."
Increase education on general obesity management
• "How to broach the subject of weight loss."
• "A clinical based solely on obesity-management."
• "A lesson specifically designed to address obesity and how to teach patients effectively."
• "A specific unit related to obesity management just like managing any other chronic disease."
• "Clinical practices and case studies."
• "Education on current guidelines."
• "Assignments specifically related to obesity management."
• "Obesity management deserves its own class."
• "Specific courses within primary care programs or a subspecialty certificate, such as that already exists for cardiology, etc."
• "Specific lessons on obesity management."
Education on population-specific obesity management
• "Algorithm very detailed for pediatric obesity management at each great group would be a great tool to have walked out of NP school with."
• "A focus on evidence-based diets with a variety of options to meet individualized needs."
• "I have attended CE courses where each 'diet' or dietary lifestyle was reviewed for effectiveness, but it focused on adult lifestyles rather than pediatric lifestyle modification."
• "How exercise programs can be tailored based on age, health, and nutritional education."
• "Nutrition and exercise planning for specific populations."

4.2. Qualitative results

Three open-ended questions that assessed students' recommendations for curricular changes were also included. Themes were identified via the qualitative analysis described previously. Results are found in Tables 3, 4 and 5, respectively.

Table 4
Themes for open-ended Question #2 with supporting statements.

What is the greatest challenge with obesity management?
Confidence/credibility
• "Not having a deep history in nutrition really limits the conversations I can have."
• "Gaining confidence in approaching this subject in a respectful manner."
• "My own struggle with weight. Presenting myself as an authority when I am overweight."
• "Determining who can get medication and who cannot."
• "Not comfortable with prescribing anti-obesity medications."
Affecting change in others
• "Ways to positively affect compliance."
• "Non-compliance."
• "Patient motivation."

Table 5
Themes for open-ended Question #3 with supporting statements.

Describe some successful strategies that you have identified regarding managing a patient with obesity:
Shared decision-making
• "Being honest. Having them develop their plan of care."
• "Creating a diet plan together, based on what the patient likes and is willing to eat."
• "Helping college students make wiser choices on campus and at preferred fast food places."
• "Encourage movement of any kind, food diary, write out measurable goals."
Specific practices
• "Carbs only for breakfast and lunch. Protein and veggies for dinner."
• "Group classes or other forms of adjunct treatment that provides for patient accountability."
• "Meal prep with opportunities to log intake and activity with an [application] or other electronic methods."
• "Logging with a journal."
• "Encouraging patients to watch Jamie Oliver's Food Revolution, as it is a personal favorite of mine."
• "Treat underlying depression."
Practical goal-setting
• "Create several short-term goals. Buddy system is also helpful."
• "Encourage a patient to make small changes, such as just walking for 5 min a day at first and then slowly building up."
• "Focusing on small achievements versus the long-term goal."

4.2.1. Suggested additions and enhancements in graduate nursing curriculum

The first theme identified by researchers was student recommendations for nursing programs to "offer education on specific aspects of nursing management." Student statements support this theme by focusing on specificity, such as dietary management, pharmacological management, exercise programs, and psychological concerns attributing to obesity. The second theme was to "increase education on general obesity management." Statements included requests for clinical rotations specializing in obesity management and adding lessons, case studies, and clinical experiences focused on communication between providers and patients with obesity as well as obesity management. The third theme was "education on population-specific obesity management." Statements included were both general ("specific populations") and precise ("pediatric obesity management").

4.2.2. Perceived challenges in obesity management

The first theme of perceived challenges was "confidence/credibility." Statements indicated students' lack of comfort, knowledge and familiarity with aspects such as anti-obesity medications and nutrition. One student noted that a personal challenge was how provider-difficulty maintaining a healthy weight might hamper credibility on the topic. The second theme was "affecting change in others." The statements supporting this theme included concerns with patient compliance and motivation to change.

4.2.3. Perceived successful obesity management strategies

The first theme of successful management strategies was "shared decision-making." Statements included being honest, encouraging, and accommodating. Students noted that patients should participate in the formulation of the management plan so it can be individualized, empowering the patient and providing them ownership. The second theme was "specific practices." Students had recommendations of dietary practices, including journaling/logging intake and activity as well as grouping with other individuals with similar goals to increase accountability and motivation. One student noted that the first step is assessment and management of potential mental health problems that may exacerbate the disease. The third theme is "practical goal-setting."

These statements all focused on setting attainable goals rather than a large goal that may be difficult or timely to reach.

5. Discussion

5.1. Research question #1. Are APN students comfortable with the overall management of patients with obesity?

The majority of APN students in this study reported feeling some degree of comfort with all identified aspects of obesity management except prescribing anti-obesity medications and having knowledge of billing for obesity management. Similar findings were seen in two different studies with physicians, advanced primary care providers, and trainees regarding lack of confidence, insufficient knowledge in medication safety profiles, and efficacy in managing obesity (Granara and Laurent, 2017; Simon and Lahiri, 2018). The qualitative data provided rich suggestions for improving nursing education on obesity management to increase student comfort. Students indicated that they want both general education on obesity management, but also for the programs to drill down on the differing nuances that present with specific populations. Based on these findings, it would be prudent for the programs to include clinical time, assignments, case studies, and simulation/standardized patient experiences focused on obesity management to increase proficiency and confidence.

5.2. Research question #2. Based on national guidelines, at which BMI level would a healthcare provider initiate therapy with anti-obesity medications?

The Endocrine Society recommends starting anti-obesity medications when an individual has a BMI ≥ 27 with one or more comorbidities or ≥30 without comorbidities (Apovian et al., 2015). Most of the participants in this study did not know that these two parameters defined the stages of disease, during which it is appropriate for a healthcare provider to introduce one or more anti-obesity medications. In a similar study, Turner et al. (2018) found that only 8% of healthcare providers appropriately recognized the thresholds to begin and continue pharmacologic therapy for obesity, with 77% selecting greater than the recommended threshold for patients who have an obesity-associated comorbidity or complication. It should be noted that the majority of the participants in the study by Turner et al. were physicians (83%), with only 17% of the sample consisting of NPs. Student participants in the current study included qualitative statements expressing insecurity about prescribing anti-obesity medications. This was also an area of intensified education recommended in the qualitative findings.

5.3. Research question #3. Does the BMI of the APN student influence the level of comfort addressing obesity-management issues with his/her patients?

Participants in this study who had overweight or obesity included statements about their weight causing them to hesitate before discussing the issue of weight management with patients, and one student identified a potential lack of credibility due to having overweight. Comparable findings were identified in a study of physicians (Bleich et al., 2012). In another study, evidence indicated that when patients had more medical conditions, they received more weight management counseling after adjustments were made for physician-patient relationship characteristics (Dutton et al., 2014). Koball et al. (2018) conducted a mixed-methods study and received 242 responses from a mailed questionnaire asking for self-reported height and weight, general health questions, and if the respondents were seeking to lose weight. Of the patients with overweight (32% of total sample), only 41.9% recalled their provider discussing weight. However, of the patients with obesity (41.9% of total sample), 71% recalled their provider discussing weight. A vast majority (92%) felt that they were interested in engaging in weight loss strategies, and 75% of patients wanted their healthcare provider to be honest and candid when talking about weight during their visits. More than half the sample (52%) reported being extremely comfortable conversing about weight with their healthcare provider, and 52% said that they would not be offended if the provider diagnosed them with overweight or obesity (Koball et al., 2018).

5.4. Research question #4. How thoroughly did APN students feel they had been prepared to provide obesity management during their graduate nursing education?

Only a third of the APN students in this sample identified that their graduate nursing program prepared them to address obesity very well or extremely well. Additionally, the levels of comfort with specific aspects of obesity management indicate mild to moderate lack of confidence of these students. These findings highlight that there is a need to enhance education regarding obesity management in the investigated APN programs to increase knowledge and confidence.

In a study by Keyworth and colleagues (2012), nursing students reported lacking confidence and techniques to talk about weight management with patients. Furthermore, these students had a perception that the curriculum of nursing lacked information on how to communicate with sensitivity on matters of obesity management. Low knowledge level in obesity management was also seen in a study with 372 healthcare providers consisting of consultants, junior doctors, nurses, healthcare assistants, pharmacists, and other healthcare professionals (Wynn et al., 2018). Nurse practitioners Roberts et al. (2015) discussed that, because there are so many weight-reduction interventions available over-the-counter, it may be difficult for providers to determine which interventions are successful and which have little benefit. These NPs further encouraged up-to-date knowledge of pharmacological options to treat obesity and understanding the efficacy, methods of actions, and clinical trial findings to support the most effective intervention decisions.

5.5. Summary

Including comprehensive obesity management information and “hands on” practice would be an improvement in NP graduate education as evidenced by participants' 1) lack of confidence in obesity management; 2) identification of concepts they desired to have included in obesity management training, and 3) inability to identify anti-obesity medications. It is imperative to ensure that students are comfortable with obesity management upon graduation (American Nurse Practitioner Foundation, 2013). Thus, providing effective strategies and confidence builders are crucial when training APNs to care for patients who struggle with weight issues (American Nurse Practitioner Foundation, 2013; Rhee et al., 2018).

5.6. Limitations

Participants' self-report of quantitative data can be identified as a limitation of this study. The qualitative portion was based on the personal experiences of APN students in various levels of training. Care should be taken not to generalize the findings to other populations but to use them as suggestions as to how to improve educational preparation in obesity management. Cross-sectional data collection with a relatively small group of participants and a low response rate (3.8%) who were mostly female and white may not have adequately identified strategies that would be more beneficial to males and other racial groups. Care should be taken to identify evidence-based practice strategies when adding educational modules or training methods to the current curriculum (Turner et al., 2018).

6. Conclusions

With the epidemic rates of overweight and obesity, nursing is well-positioned to take on the challenge of providing evidence-based care

and promoting health. An excellent way to improve care is to ensure that APNs are highly skilled in obesity management. Students need preparation with the necessary tools to start the conversation about obesity management and become equipped to promote success. Students often need coaching on how to start the conversation in a kind, respectful, and non-offensive manner.

This descriptive study revealed that graduate students identified obesity management as an important topic that needs to be strategically placed in the curriculum. It is important to prepare students to be successful with all aspects of obesity management. It is critical that updated pharmacological treatment also be included into the curriculum. Creative ways to implement obesity management curriculum can be accomplished through didactic content, clinical time, case studies, and standardized patient experiences. Curricula modules should include best-practices related to overweight and obesity management. One excellent example of an obesity educational program is the Introductory Certificate of Obesity Management in Primary Care offered by the American Association of Nurse Practitioners (2018). The program consists of seven modules focused on obesity management that faculty may find helpful to insert in the curriculum. Confidence in obesity management is an important outcome that needs to occur with graduate APN education.

It is important to note that when graduate students have personal struggles with weight, they may be hesitant to engage in obesity management with patients. Educators can convey to students that being affected by obesity, as by any other chronic disease, does not prohibit the healthcare provider from providing high-quality care. It has been found that when providers share their own experiences, it can be encouraging and inspiring to patients (Armstrong et al., 2018; Bleich et al., 2012).

Nurse practitioners throughout the years have taken the lead on implementing high quality health promotion and disease prevention, and can thus take the lead on providing high quality obesity management. Educators have an excellent opportunity to make a difference in the obesity epidemic by thoroughly preparing the next generation of APNs to provide high-level care to patients with overweight and obesity.

Declarations of interest

None.

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