Published in final edited form as:

Nurse Pract. 2019 June ; 44(6): 41–46. doi:10.1097/01.NPR.0000558157.76596.c7.

Nurse Practitioner Students' Awareness of Obesity Bias within Clinical Practice

Caitlyn Hauff, PhD [Assistant Professor of Kinesiology and Health Promotion],

Department of Health, Kinesiology, and Sport, University of South Alabama College of Education and Professional Studies, 171 Jaguar Drive, HKS 1020, Mobile, Alabama, 36688

Sharon M. Fruh, PhD, FNP, RN [Professor and Associate Dean for Research, Evaluation, & Development],

University of South Alabama College of Nursing, 5721 USA Drive North, Mobile, Alabama 36688

Rebecca J. Graves, PhD, NP-C [Assistant Professor and Director of Special Projects and Evaluation],

University of South Alabama College of Nursing, 5721 USA Drive North, Mobile, Alabama 36688

Brook M. Sims, M.S. [Doctoral Candidate],

University of South Alabama, Combined-Integrated Clinical and Counseling Psychology Program

Susan G. Williams, PhD, RN [Assistant Professor],

University of South Alabama College of Nursing Baldwin County Campus, 161 North Section Street Suite C, Fairhope, Alabama 36532

Leigh A. Minchew, DNP, WHNP-BC, PMHNP-BC [Associate Professor and Chair of Maternal-Child Nursing],

University of South Alabama College of Nursing, 5721 USA Drive North, Mobile, Alabama 36688

Heather R. Hall, PhD, NNP, RNC [Dean and Professor],

University of South Alabama College of Nursing, 5721 USA Drive North, Mobile, Alabama 36688

Terrie H. Platt, DNP, RN, WHNP-BC, NCMP [Assistant Professor], and

Coordinator of Women's Health Specialty Option, Maternal Child Nursing, USA College of Nursing-HAHN 4051, 5721 USA North Drive, Mobile, Alabama 36688

Mi'Asia Barclay [Undergraduate Student]

University of South Alabama

Abstract

The purpose of this study was to explore Nurse Practitioner students' (1) encounters with obesity stigma and bias in their clinical environment and (2) recommendations to decrease obesity stigma and bias. Results indicate a need for continued education on the topic of weight management during Nurse Practitioner curriculum.

Corresponding Author: chauff@southalabama.edu.

Declarations of interest: none

No conflict of interest and ethical approval

Background

Data from the 2015–2016 National Health and Nutrition Examination Survey suggests that 31.8% of American adults have a body mass index (BMI) in the *overweight* category (25–29.9), 39.8% have a BMI in the *obese* category (30–39.9), and 7.6% have a BMI in the *severe obesity* category (body mass index ≥ 40).^{1,2} Although overweight and obesity are conditions that affect both genders, all ages, and all racial and ethnic groups, women of lower socioeconomic status are 50% more likely to have obesity when compared to women within higher socioeconomic status.^{3–5} Factors associated with overweight and obesity are multifaceted and include metabolic, genetic, behavioral, environmental, cultural, and socioeconomic influences, yet family practice providers often hold negative attitudes and beliefs toward individuals with obesity.^{6–10} Obesity bias (or weight bias, which is inclusive of a BMI in the *overweight* category) is a negative, often discriminatory belief or behavior based on the weight of an individual.¹¹ This occurs in many medical settings and can impact patients' willingness to obtain healthcare.¹⁰ Providers may stigmatize patients with obesity, blaming them for their inability to engage in health-promoting behaviors.^{9,12} For instance, implicit bias, an automatic, uncontrolled reaction or bias, was found within exercise professionals and healthcare providers having pro-thin and anti-fat attitudes who stereotyped persons with overweight to be lazy, unintelligent, and worthless.^{13,14}

Nurses, the frontline providers of healthcare, are not exempt from holding biases against persons with obesity.^{9,15} One investigation uncovered that some nurses believed patients with obesity lacked self-control, rarely expressed their true feelings, and were less successful.¹⁶ Furthermore, those nurses viewed working with persons with obesity to be physically exhausting and stressful, and they preferred to not care for these patients.¹⁶ Negative attitudes often perpetuate healthcare disparities between patients with a BMI in the *normal* category versus those with a BMI in the *overweight* and *obese* categories.¹⁷ Medical providers have reported altering their medical practices and choices of treatment when interacting with patients with a BMI in the *overweight* or *obese* categories, especially if the patient is female (e.g., pelvic examinations), compared to patients with a BMI in the *normal* category.^{7–8,11} Such implicit bias, as well as explicit bias (a controlled, intentional reaction or bias), affects rapport-building and reduces emotional concern (i.e., empathy), whereas those patients with obesity may benefit from more motivational-skills enhancement and medical counseling.¹⁸

Obesity stigma places a significant barrier against the efforts of healthcare providers to effectively manage obesity.^{11,19–20} Implicit and explicit biases and environmental cues may engender a sense of reluctance to seek treatment for overweight and obesity (e.g., fearful of being shamed, embarrassed, or marginalized in the office), only to exacerbate weight-related issues as well as other conditions unrelated to weight.^{11,19,21} For example, women with overweight and obesity have delayed clinical breast examinations, gynecologic examinations, and Papanicolaou smears and received fewer mammography examinations compared to women with normal weight.^{11,22} Additionally, anticipatory stress and acute reactions from stigmatizing environments may reduce the quality of the encounter with the provider creating immediate health detriment and long-term consequences.¹¹ For instance, stress during the encounter may impact the patient's ability to engage with the provider and

process treatment information properly. Patients with obesity and those who feel embarrassed are less likely to seek weight-loss advice or initiate weight-related conversation with the provider.^{21,23} In turn, patients may not recall advice or instructions given by the provider, reducing adherence to weight management plans, or patients may become defensive and entirely disregard feedback from the provider.²⁴ Patients may also cancel or not show up for appointments if they feel that the provider may be frustrated or disappointed with an inability to lose weight.^{24,25}

Obesity bias in the healthcare center also affects future healthcare professionals.²⁶ Students completing clinical rotations and practicums are easily impressionable and may become perpetrators of the obesity bias and stigmatization if not trained properly.²⁷ To best address the “Obesity Crisis in America,” implementation of embedded overweight and obesity management instruction and training within healthcare education may be needed to educate future medical professionals and frontline providers.^{27–29} As such, the guiding objective of this research study was to encourage nurse practitioner (NP) students to reflect and report on their clinical experiences. An exploratory approach was used to examine potential obesity bias and stigma specifically within women’s health clinics.

Methods

In this descriptive, qualitative study, the researchers explored obesity bias witnessed by women’s health NP students in the clinic setting during their practicum experiences. The study was approved by the university’s Institutional Review Board before data collection. A lesson on weight bias and an accompanying assignment were embedded in an online course in the women’s health NP program. Participants were asked to create a brief initial post within a “threaded discussion” in the course platform on the university’s learning management system to explain any circumstance of obesity bias observed while in training and any problems identified with these findings. Participants were then asked to reflect through a “cross-post” on another student’s initial post. Students in the course were located across the U.S., as this was an online-based NP education program. The course was provided through a university on the U.S. Gulf Coast. The NP students received course credit for both the initial post and cross-post.

Participants.

Participants were women’s health NP students, most of whom are also full-time registered nurses at acute and/or ambulatory care obstetrics/gynecology (OB/GYN) facilities across the nation. A total of 44 female NP students ($M_{\text{age}} = 34$ years old; $SD = 7.9$) participated in this online classroom forum. The racial/ethnic composition of the sample was 53% White/Caucasian American, 40% Black/African American, 4% Hispanic/Latino, and 2% Asian American. Self-reported BMI ranged from 18 to 43 ($M = 27.5$; $SD = 5.9$).

Procedures.

The NP students were assigned two recently published peer-reviewed research articles about obesity bias in healthcare settings.^{19,30} After reading the articles, the students were instructed to create an original initial post in a threaded discussion entailing: (1) their

encounters with overweight or obesity bias in their current women's health clinic environments, which varied substantially in location, demographics, and socioeconomic status; and (2) what strategies they would recommend implementing in the practice setting to decrease obesity stigma and bias.

Data analysis.

Once the threaded discussion was closed for submission, two of the authors de-identified the submissions and compiled the responses. Using a directed content analysis approach, two members of the research team coded the submitted student responses.³¹ Each coder was familiarized with the prompted questions and source material. Using an open-coding procedure, the researchers then coded the responses independently in order to gain a descriptive understanding of each participant's experience and recommendations. The two-person coding team met to discuss their findings and to reach a consensus on the emergent themes. After consensus was met, two additional members of the research team reviewed the code groupings and provided feedback on the emergent themes to enhance the trustworthiness and rigor of the data analysis process.³² These methods serve to triangulate the data and strengthen the credibility of the interpretations.^{33–34}

Results

Within the two overarching categories, encounters with obesity bias and clinical recommendations for practice settings, there were specific themes. The first overarching category contained three themes: (1) issues in the built and social environment, (2) awareness of obesity bias, and (3) perceptions of individuals with larger bodies. The second overarching category also contained three themes: (1) improving training programs, (2) creating office spaces and obtaining equipment to be size inclusive, and (3) redefining perceptions of obesity.

Encounters with obesity bias.

Issues in the built and social environments.—Student responses identified three major issues that occurred in their practice settings that contributed to weight bias: (1) inappropriate equipment, (2) inadequate privacy, and (3) unsuitable language use. In regards to inappropriate equipment, one student stated, “In the clinical setting [they do] not carry bigger gowns for patients, and nurses are often searching for larger blood pressure cuffs because they are not kept in every room.” Another participant mentioned that her practicum clinic only uses paper gowns, which are thin, small, and lacking in coverage. The use of paper gowns could quickly make a woman of a larger size uncomfortable if the gown does not properly cover her body while waiting for an examination.

Students also addressed the lack of privacy in the clinics, particularly in regards to weighing patients. Many NP students reported that not only are scales in open areas, but many nurses say the patient's weight out-loud, which may lead one to feel uncomfortable or self-conscious. One student noted:

The scale is in a wall nook that is only thirty-two inches wide. Even for a patient that is in the upper level of normal body mass index, this width is rather narrow.

When a [patient having obesity] needs to be weighed, the scale must be pulled out of the nook for the patient to step on it, leading to unnecessary embarrassment.

The final issue mentioned was more social, and had to do with the type of language used in a practice setting. Students noted that clinicians and nurses alike make negative comments about patients with overweight and obesity. One NP student explained a scenario she experienced on the first day of her clinical rotation:

One of the medical assistants was preparing to bring a patient into an examination room. Once she reviewed her medical record and noticed she was diagnosed with obesity, the assistant asked another staff member if there were any extra-large speculums because the patient was “huge.”

A second NP student expressed that nurses would make negative comments and jokes about patients with larger bodies in an area where the patient could easily hear them. The student stated, “I have heard insults and stereotyping amongst the non-clinical staff/receptionists before and after seeing certain patients.” A third student noted, “My preceptor’s colleagues in this clinic have made comments in regards to patients with obesity being lazy or unhygienic.” In a more extreme circumstance, a student reported:

...the author had watched a doctor shame a patient for gaining weight, get frustrated in front of a patient when the patient offers excuses for weight gain and cut a patient’s appointment off when the provider did not feel that the patient was making an effort to move forward in the program.

It is evident that a variety of bias-related issues occur not only in the built environment but socially among individuals in these clinical environments as well.

Awareness of obesity bias.—A positive outcome of the assignment related to the notion that NP students increased awareness of their own biases and the biases of others by reading the articles and completing the assignment. Some students admitted that they, along with their preceptors, show bias, although it might not always be explicit. One student explained:

I still hold a personal bias that is certainly not conducive to becoming a better healthcare provider. For example, I often feel frustrated when I am unable to easily assess for fetal heart tones, and the patient responds with, ‘People always have a hard time finding my baby.’ Sometimes I think, ‘No, it is because you are big.’ I have never said this out loud to any patient of mine, but I do feel it is wrong of me to have these thoughts.

Another student acknowledged her own bias stating, “I would much rather perform a wellness visit on a patient with a healthier weight than one with a very high BMI.” In addition to awareness of personal biases, some students stated that they do not believe that staff members in many of these clinic settings are aware of what obesity bias is; therefore, they engage in behaviors that are not size inclusive.

Perceptions of individuals with larger body sizes.—The last emergent theme suggested that some preceptors, students, and clinical staff members hold negative perceptions about individuals with larger bodies. Students reported, “The writer has also

heard multiple provider assumptions that the patient will not be successful or will gain all of the weight back once the medication is discontinued” and “...when I have larger patients, and I have to get fetal heart tones or NSTs, I find myself becoming irritated because I automatically assume that it is going to be difficult because the patient has obesity.” Preconceived notions about individuals with overweight and obesity held by students and preceptors make treatment not only discriminatory but likely increase the odds that a patient will avoid future visits.

Unfortunately, one student gave an example of a preceptor teaching incorrect methods during a speculum exam, potentially stemming from obesity bias of the preceptor:

An incident occurred when attempting a pap smear on a female patient with obesity that a proper speculum size was not available in the office. My preceptor changed out two different speculums in attempting to collect a pap smear which was extremely difficult with what was available in the office setting. This was an unfair service to the patient by the facility not having adequate equipment available to meet her needs.

A woman who has overweight or obesity may need to change her position to assist the provider in a proper speculum exam (e.g., pull her knees toward her chest until the cervix is visualized), but the body size of the woman does not designate the size of the speculum required.^{35,36}

Clinical recommendations for practice settings.

Improving training programs.—The majority of student responses included the recommendation of improving graduate training programs that feature obesity bias and appropriate treatment of patients with overweight and obesity. The NP students suggested training on weight-related issues and sensitivity should be available for healthcare providers, staff, and students. Specifically, one NP student stated:

The key to decreasing the incidence of obesity bias is education. Education is a must in the medical community as well as the local community. Educating people on all levels allows those who discriminate to be knowledgeable of the consequences of these actions and how they impact the lives of others.

Another stated, “Learning more effective ways to manage obesity, such as regular nutrition counseling and referrals to a dietician, community programs, and a bariatric surgeon when indicated, will provide patients with the guidance and tools needed to achieve weight loss.”

Students in this study found it imperative to create better training modules and procedures in order to best educate all those in the clinical environment on obesity bias. Those students who felt that bias was not present in their setting even suggested annual training to remind individuals to self-reflect on their biases to increase rapport when treating patients with overweight and obesity. It was suggested that individuals in clinical settings should also be educated on the outcomes of weight bias, so staff recognizes the resulting harm of negative language and preconceived notions.

Creating office spaces and obtaining equipment to be size inclusive.—As mentioned previously, one of the biggest instances of bias noted in clinical settings was regarding inappropriate equipment and lack of size inclusiveness in office spaces. Thus, students suggested a need to provide equipment that was appropriate for individuals of all shapes and sizes. For example, having equipment suitable for all sizes available in the exam rooms. Having to send a patient down the hall to receive treatment elsewhere or causing the nurse/clinician to leave the room to find better equipment could easily make a patient feel self-conscious or excluded. Thus, students said, it is imperative to provide gowns, blood pressure cuffs, examination tables, scales, and other equipment that will meet the needs of individuals with overweight and obesity. Students also recommended making changes to waiting room areas and areas where patients are triaged.

Redefining perceptions of obesity.—The last theme was the recommendation to help students, practitioners, and staff alike redefine the term “obesity” and reconsider why obesity exists. Students recommended that clinicians discuss and view obesity as a chronic disease and not a personal issue (which is often the typical rhetoric in society). One NP student stated:

In the clinical setting, it is important to emphasize healthy lifestyles instead of focusing on achieving the ideal weight. This will encourage the patient to attain goals that lead them to successful weight loss without the pressure of obesity stigma.

Another student suggested, “... help shift providers’ view to recognizing obesity as a disease; understanding that not all patients chose to be overweight would inspire [healthcare] management in a similar tone as those with other diagnoses.”

Students expressed a need to create a person-centered approach when discussing obesity with patients. They also recognized the need to acknowledge obesity as a complex disease that has multiple layers of influence. Understanding and acknowledging that obesity is not always a personal choice but is rather often a result of various biological, psychological, and environmental factors may shift the perceptions individuals have when treating patients with obesity.

Conclusion

Women’s health NP students are exposed to obesity bias in their clinical and educational experiences, enhancing the potential that they too may engage in obesity bias when caring for patients with obesity. Often, students and preceptors alike are unaware of their personal biases and their expression of them. However, the results of this study support that increasing awareness of implicit obesity bias can inspire the student and, thus, future provider, to decrease both implicit and explicit bias. It is important that both students and those teaching them are aware of how the language they use and the specific clinical environment may impact the patient. Preventing obesity stigma and bias is critical for high-quality patient care.

Unintentionally, the medical environment can be a space where a negative stigma occurs for patients with overweight or obesity. Patients are vigilant to detect the possibility of being stereotyped or marginalized due to their physical size when visiting the medical office. The lack of accommodating space, equipment, and gowns may be perceived as unsupportive and insensitive to persons who are struggling to successfully incorporate healthier lifestyle changes in order to reduce their BMIs. Compounding this, perceived bias and judgment from healthcare providers and staff, both medical and non-medical overheard or sensed by patients, creates barriers to their receptivity, comfort, and satisfaction when meeting with the provider and increases the likelihood that the patient will not seek healthcare due to embarrassment, shame, or anger.

By improving training programs, restructuring office spaces and obtaining equipment to be size inclusive and by redefining perceptions of obesity, providers have the opportunity to connect better with patients who have overweight or obesity, ultimately providing better care and developing a better provider-patient rapport. Including instruction on obesity bias for future providers during their healthcare education programs could provide a lasting foundation helping them to identify issues in the built and social environments, awareness of obesity bias by oneself and one's office staff, and perceptions of individuals with larger body sizes.

Acknowledgments

Funding source: Research reported in this publication was supported by the National Center for Advancing Translational Sciences of the National Institutes of Health under award number UL1TR001417. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

References

- Centers for Disease Control and Prevention. Defining adult overweight and obesity: Overweight & obesity 2017 <https://www.cdc.gov/obesity/adult/defining.html>
- Fryar CD, Carroll MD, Ogden CL. Prevalence of overweight, obesity, and severe obesity among adults aged 20 and over: United States, 1960–1962 through 2015–2016. National Center for Health Statistics; Centers for Disease Control and Prevention 2016 https://www.cdc.gov/nchs/data/hestat/obesity_adult_15_16/obesity_adult_15_16.htm
- Flegal KM, Kruszon-Moran D, Carroll MD, Fryar CD, Ogden CL. Trends in obesity among adults in the United States: 2005 to 2014. JAMA 2016; 315(21): 2284–2291. [PubMed: 27272580]
- Meit M, Knudson A, Gilbert T, et al. The 2014 update of the rural-urban chartbook Rural Health Reform Policy Research Center 2014; 24–25.
- Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011–2012. JAMA 2014; 311(8): 806. [PubMed: 24570244]
- Moulder R, Schwartz D, Goodlett DR, Dayon L. Proteomics of diabetes, obesity, and related disorders. Proteomics Clin Appl 2018; 12(1).
- Mackey C, Plegue MA, Deames M, et al. Family physicians' knowledge, attitudes, and behaviors regarding the weight effects of added sugar. Sage Open Med 2018; 6.
- Glauser TA, Roepke N, Stevenin B, Dubois AM, Ahn SM. Physician knowledge about and perceptions of obesity management. Obes Res Clin Pract 2015; 9(6): 573–583. [PubMed: 25791741]
- Brown I (2005). Nurses' attitudes towards adult patients who are obese: Literature review. J Adv Nurs 2006; 53(2): 221–232.

10. Forhan M, Ramos Salas X. Inequities in healthcare: A review of bias and discrimination in obesity treatment. *Can J Diabetes* 2013; 37: 205–209. [PubMed: 24070845]
11. Tomiyama AJ, Carr D, Granberg EM, et al. How and why weight stigma drives the obesity ‘epidemic’ and harms health. *BMC Med* 2018; 16(1): 123. [PubMed: 30107800]
12. Nutter S, Alberga AS, MacInnis C, Ellard JH, Russell-Mayhew S. Framing obesity a disease: Indirect effects of affect and controllability beliefs on weight bias. *Int J Obes (Lond)* 2018; 42(10): 1804–1811. [PubMed: 29795457]
13. Schwartz MB, Chambliss HO, Brownell KD, Blair SN, Billington C. Weight bias among health professionals specializing in obesity. *Obes Res* 2012; 11(9): 1033–1039.
14. Panza GA, Armstrong LE, Taylor BA, Puhl RM, et al. Weight bias among exercise and nutrition professionals: A systematic review. *Obes Rev* 2018; 19(11): 1492–1503. [PubMed: 30176183]
15. Tanneberger A, Ciupitu-Plath C. Nurses’ weight bias in caring for obese patients: Do weight controllability beliefs influence the provision of care to obese patients? *Clin Nurs Res* 2018; 27(4): 414–432. [PubMed: 28052689]
16. Maroney D, Golub S. Nurses’ attitudes toward obese persons and certain ethnic groups. *Percept Mot Skills* 1992; 75(2): 387–391. [PubMed: 1408594]
17. Chapman EN, Kaatz A, Carnes M. Physicians and implicit bias: How doctors may unwittingly perpetuate health care disparities. *J Gen Intern Med* 2013; 28(11): 1504–1510. [PubMed: 23576243]
18. Keeley R, Engel M, Reed A, Brody D, Burke BL. Toward an emerging role for motivational interviewing in primary care. *Curr Psychiatry Rep* 2018; 20(6).
19. Puhl RM, Heuer CA. Obesity stigma: Important considerations for public health. *Am J Public Health* 2010; 100(6): 1019–1028. [PubMed: 20075322]
20. Dietz W, Baur L, Hall K, et al. Management of obesity: Improvement of health-care training and systems for prevention and care. *Lancet* 2015; 385: 2521–2533. [PubMed: 25703112]
21. Malterud K, Ulriksen K. Obesity in general practice: A focus group study on patient experiences. *Scand J Prim Health Care* 2010; 28(4): 205–210. [PubMed: 20942741]
22. Ferrante JM, Chen PH, Jacobs A. Breast and cervical cancer screening in obese minority women. *J Womens Health* 2006; 15(5): 531–541.
23. Mensinger JL, Tylka TL, Calamari ME. Mechanisms underlying weight status and healthcare avoidance in women: A study of weight stigma, body-related shame and guilt, and healthcare stress. *Body Image* 2018; 25: 139–147. [PubMed: 29574257]
24. Puhl RM, Moss-Racusin CA, Schwartz MB. Internalization of weight bias: Implications for binge eating and emotional well-being. *Obesity* 2012; 15(1):19–23.
25. Kirk SFL, Price SL, Penney TL, et al. Blame, shame, and lack of support: A multilevel study on obesity management. *Qual Health Res* 2014; 24(6): 790–800. [PubMed: 24728109]
26. Puhl RM, Luedicke J, Grilo CM. Obesity bias in training: Attitudes, beliefs, and observations among advanced trainees in professional health discipline. *Obesity* 2013; 22(4): 1008–1015. [PubMed: 24124078]
27. Jansen S, Desbrow B, Ball L. Obesity management by general practitioners: The unavoidable necessity. *Aust J Prim Health* 2015; 21: 366–368. [PubMed: 26349423]
28. The obesity crisis in America: Hearings before the Subcommittee on Education Reform, of the House Committee on Education and the Workforce, 108th Cong (2003) (testimony of Richard H. Carmona)
29. Alberga A, Pickering B, Hayden A, et al. Weight bias reduction in health professionals. *Clin Obes* 2016; 6: 175–188. [PubMed: 27166133]
30. Fruh SM, Nadgowski J, Hall HR, et al. Obesity stigma and bias. *J Nurse Pract* 2016; 12(7): 425–432. [PubMed: 28408862]
31. Zhang Y, Wildemuth BM. (2016). Qualitative analysis of content. In: Wildemuth BM (ed). *Applications of Social Research Methods to Questions in Information and Library Science* Second edition. Santa Barbara: ABC-CLIO; 2016: 318–329.
32. Lindlof TR, Taylor BC. *Qualitative Communication Research Methods* Fourth edition. Los Angeles: SAGE; 2017.

33. Krefting L Rigor in qualitative research: The assessment of trustworthiness. *Am J Occup Ther* 1991; 45(3): 214–222. [PubMed: 2031523]
34. Neuendorf KA. (2016). *The Content Analysis Guidebook* Second edition. Los Angeles: SAGE; 2016.
35. Carcio HA, Secor RM. The physical examination. *Advanced Health Assessment of Women: Clinical Skills and Procedures* Third edition. New York: Springer; 2015: 55–78.
36. Fogel CI. Well-woman assessment. In: Fogel CI, Woods NF, & Roberson DW (Eds.). *Women's Health Care in Advanced Practice Nursing* New York: Springer; 2008:185–194.