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Health Professionals' Experiences Providing Breastfeeding-Related Care for Obese Women

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Abstract

Background: Obese women are at high risk of early breastfeeding cessation, and health professionals (HPs) have a unique opportunity to provide them with breastfeeding support. Our objective was to describe HPs' experiences providing breastfeeding care for obese women during the prenatal, peripartum, and postpartum periods.
Materials and Methods: In-depth, qualitative interviews were conducted with 34 HPs (including obstetricians, midwives, pediatricians, nurses, and lactation consultants) who care for pregnant or lactating women. They were recruited from a variety of settings in central New York. Interviews were audio-recorded, transcribed, verified for accuracy, and then analyzed qualitatively.
Results: HPs identified obesity in multiple ways, some of which were consistent with standard cutoffs, whereas others implied extreme obesity. Nearly all HPs discussed ways they perceive obese women have challenges with breastfeeding. Some HPs described challenges as specific to obese women (e.g., limited mobility), whereas others described challenges as universal but more likely to occur among obese women (e.g., difficulties positioning the infant to breastfeed). Across professions, HPs described providing breastfeeding care for obese women as requiring more time and physical work and as being more challenging. HPs acknowledged stigma around obesity and discussed treating obese women with dignity and the same as other women. Strategies were suggested for improving breastfeeding support for obese women.
Conclusions: HPs identified multiple challenges that obese women encounter with breastfeeding, as well as their own challenges with providing care. Comprehensive strategies are needed to assist obese women with breastfeeding and to alleviate strain on HPs who provide their care.

Introduction

Obesity has reached epidemic proportions in the United States; more than a third of reproductive-age women are obese (body mass index [BMI] of $\geq 30\,kg/m^2$), and 8% are extremely obese (BMI of $\geq 40\,kg/m^2$).[1] Nearly 20% of pregnant women are obese before conception.[2] Obesity presents multiple risks and complications for childbearing, including delayed onset of lactogenesis and failure to initiate or sustain breastfeeding.[3–5] In a systematic review, nine of 10 studies demonstrated that obese women were more likely to fail breastfeeding initiation than normal-weight women (odds ratios ranging from 1.38 to 3.09).[4] Among those who did initiate breastfeeding, obese women were at higher risk of discontinuing breastfeeding early, even after adjusting for confounding factors.[4] These poor breastfeeding outcomes are a concern because both obese women and their infants could benefit from breastfeeding. In women, breastfeeding has been associated with reduced risk of breast cancer, metabolic syndrome, hypertension, and type 2 diabetes.[6] In children, longer duration of breastfeeding is associated with reduced risk of becoming obese, as well as lower rates of infection, sudden infant death syndrome, pediatric cancers, and asthma.[7]

Health professionals (HPs) are in a unique position to provide support for breastfeeding. Despite ample evidence that obese women breastfeed for a shorter time, preliminary data suggest that obesity is not widely recognized as a risk factor for breastfeeding difficulties among HPs in the United States.[8] Conversely, in Denmark, where breastfeeding is the cultural norm and obesity is less prevalent, HPs recognized obesity as problematic.[9]

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Little is known about HPs' experiences providing breastfeeding-related care for obese women. Our principal research objectives were to understand how HPs across the continuum of care perceive breastfeeding among obese women and how they experience providing their care to identify potential barriers and ways to improve breastfeeding-related care. Previous research investigating this issue relied on surveys, limited to a narrow set of questions and answers.[8,9] We used a qualitative design for this study to capture information beyond what could be obtained from a survey.[10]

Portions of this study have been published previously in abstract form.[11,12]

Materials and Methods

HPs who provide care during the pre-, peri-, and postnatal periods were recruited from practices in two central New York counties. Recruitment e-mails identifying the researcher as a dietitian were sent through listservs to HPs in obstetrics, midwifery, family medicine, and pediatric practices. Additional recruitment occurred through flyers in hospital staff areas and chain referral, through which community-based HPs were reached. Recruitment materials included the statement ''some women have more difficulty breastfeeding than others'' and stated that the purpose of the study was to understand HPs' experiences providing care for these women. Some e-mails also included a statement that ''obese women are less likely to start or continue breastfeeding.'' Purposive sampling was used to select professionals from a variety of practice types and who provided care in different points across the care continuum. Interviews were conducted between August 2011 and February 2013, with written informed consent obtained before each interview. This study was approved by the Institutional Review Board at Cornell University and also the Rochester General Hospital Research Institute.

A semistructured, in-depth interview with each participant was conducted by C.D.G., a female doctoral student who had previously worked as a pediatric dietitian and had no relationships with participants prior to this study. An interview guide, tested before beginning this study, was used (Appendix). To facilitate collection of information that could not have been obtained in a strict question–answer format, interviews were largely participant-driven. Probing was used to explore ideas that emerged.

Interviews took place in locations that participants chose, typically in private areas at workplaces, homes, or coffee shops, and averaged 53 (range, 30–110) minutes. Participants' demographic information was obtained by questionnaire after each interview. Field notes about the interview setting, participant actions, and body language that could affect interpretation of transcripts were recorded immediately after each interview. Interviews were audio-recorded with permission, transcribed verbatim, and checked to ensure accuracy.

Content analysis of transcripts was conducted by two of the authors (C.D.G. and S.L.R.). Each transcript was analyzed iteratively using a combination of predetermined and emergent codes, shown in this analysis as the primary themes.[13] ATLAS.ti version 7 software (ATLAS.ti Scientific Software Development GmbH, Berlin, Germany) was used to manage qualitative analysis. Regular peer-debriefing[14] meetings were held to discuss analysis, to come to agreement about coding, and to identify ideas to explore further in subsequent interviews. Findings were also discussed with a physician similar to those who participated. Data collection ceased once data saturation—the point at which no new information was observed in additional data—was reached, and once a minimum number (two to four) of each type of HP had been enrolled. The final analysis represents a joint interpretation of the data by the authors.

Results

Participants

Interviews were conducted with 34 HPs (Table 1), between 31 and 84 years of age; 30 were white, one was black, two were mixed race, and two were Hispanic. HPs had been in their current professions from <5 to >30 years. Practice settings were diverse and included private practice prenatally and postpartum as well as hospital, public health, and community settings. Participants identified as lactation consultants primarily provided lactation-related care but had other training as nurses, social workers, and physician's assistants. One certified nurse midwife and two registered nurses had additional training in lactation counseling but did not work in that role. Both nurse practitioners and all three family medicine physicians provided prenatal and postnatal care. The HPs' patient populations included rural, small town, suburban, and urban residents.

Theme 1: identification of obesity

HPs identified obesity in many ways, including external and internal definitions and a combination of the two. About half of all HPs described obesity using an external definition of the World Health Organization cutoff, BMI of $\geq 30\,kg/m^2$. Some HPs described BMI cutoffs other than the World Health Organization, such as ''… a BMI of over 40—that's obese,'' whereas others said they would ''have to look it up.'' A few HPs, usually lactation consultants, said that they ''look in the chart and see what the doctor determines'' in the problem list. The internal definitions used to describe obesity varied but were usually consistent with extreme obesity. Typically, such definitions included specific weights, such as ''300 pounds,'' or a visual body assessment: ''… somebody who is as tall as they are fat, I guess. You know when you

Table 1. Number of Participants by Profession and Gender

	Number	
Type of health professional	*Total*	*Women*
Physicians		
Obstetricians	4	2
Pediatricians	4	3
Family medicine	3	2
Certified nurse midwives	5	5
Nurse practitioners	2	1
Registered nurses	8	8
Lactation consultants	8	8
Total	34	29

look at somebody they have fat hanging. …'' Those who provided care postpartum, such as pediatricians, relied on their visual assessments: ''way over 250 pounds, you know…they're obviously obese.''

Many HPs used both an internal and an external definition, which were often not in agreement. Some cited the World Health Organization BMI cutoff but then talked about ''a true obese patient.'' A few were consciously aware of a discrepancy between external and internal definitions: ''… I think a BMI of 30 is pretty normal for a lot of people.'' Furthermore, some HPs tended not to use the word obese and instead used ''heavy,'' ''a big girl,'' ''large,'' or ''overweight'' in place of obese.

Theme 2: HPs perceive challenges for obese women

Initial responses about obesity and breastfeeding fell into three main categories: more difficulty, ''the same as everyone else,'' and ''never thought about it before.'' It is interesting that regardless of their initial response, nearly all participants identified ways that obese women have more challenges or require more breastfeeding help (Table 2). Some identified challenges specific to obese women (e.g., extra body tissue), and others believed that the ''reasons [for breastfeeding difficulties] are universal'' but that obese women are more likely to have them (e.g., latching difficulties).

Physical challenges. Physical challenges, either specific to the mechanics of breastfeeding or general challenges of obesity, were most commonly discussed. Large breasts, especially ''huge, pendulous breasts,'' were the most widely discussed physical challenge. Flat nipples or an inability to see the nipples posed additional challenges, especially for latching. Additionally, positioning the baby at a large breast could require help from others.

Excess breast and body tissue to manipulate and handle was described as problematic. Some HPs believed obese moms are concerned they will smother the baby with excess tissue. Although some physicians were also concerned about this, most lactation consultants believed that this was a problem that could be overcome with proper positioning. Excess body tissue was described as challenging for getting comfortable to breastfeed.

Impaired mobility resulting from obesity was described as a challenge that impacts breastfeeding because movement in general is difficult. It takes ''extra work to move around,'' especially for women immediately postpartum when breastfeeding is initiated. This extra work is problematic because ''you need stamina'' to breastfeed. Moreover, ''they can't get their baby, and then they have to call for help.'' Cesarean deliveries, more common among obese women, exacerbate such problems, and with decreased mobility there was concern of infections: ''… once somebody is sick, you can forget about breastfeeding.''

Table 2. Subthemes and Categories That Emerged in Theme 2 (Health Professionals Perceive Challenges for Obese Women), with Example Quotations

Theme, subtheme	*Category*	*Example quotations (participant)*
Health professionals perceive challenges for obese women		
Physical challenges	Problematic breasts/nipples	''The nipple is pointing way down like that, so it's almost like you've got to hold up the breast and hold the baby. It's just awkward.'' (05RN)
	Excess tissue	''She's probably over 300 pounds and tried to breastfeed but this poor little baby, you know, you try and nurse a little tiny baby and their nose is right next to their mouth, like truly was smothered by this woman's breasts. And I think the effort that it would go into for her to breastfeed was just too much.'' (21MD)
	Limited mobility	''I would say mostly it's just an effort for somebody who's very heavy to try to get themselves into position. It just takes more time and they tire more quickly.'' (26MD)
	Uncomfortable	''… she's got so much of a panis, and breasts are huge, that she's just uncomfortable.'' (21MD)
	Need extra help	''It takes two hands to hold her breast, so dad holds the baby, and that works, too.'' (10LC)
	Health conditions	''But the other thing is I know that diabetes can decrease your, um, your milk supply. It can, it can delay your milk supply and decrease the—the volume that you are able to produce.'' (12LC)
Psychological barriers	Everything is harder	''… and I think sometimes when you're obese, like, it's harder to do things, and things require more effort and they seem overwhelming to you. And I just feel like they feel like it would be easier to bottle feed.'' (11MD)
	Self-conscious	''… larger women don't even want to expose any part of their body, let alone their breast.…you can't be as private or discreet when you have larger breasts, larger body.'' (04LC)
	Lack confidence/ motivation	''So, if I had a theory it would be that the person who's overweight, um, might be somebody who has a lower pain threshold, a lower perseverance, um, push-through—kinda go-to personality.'' (24RN)
Social barriers	—	''When I put those three together [obesity, socioeconomic status, and African American], those are my groups of women who tend not to breastfeed.'' (13MD)

Physiological challenges for lactation were mentioned by few HPs. Primarily HPs with some lactation training identified obesity-related health conditions, such as polycystic ovarian syndrome and infertility as ''red flags,'' because these are related to ''a hormonal inability to successfully breastfeed.'' Also, a history of diabetes or thyroid disease was described as ''milk production concerns.'' Obesity itself, however, was infrequently mentioned. Only three HPs considered possible involvement of progesterone or prolactin due to obesity: ''I've often suspected, um, that women that were larger didn't make that shift so well. Um, that there was so much progesterone that the prolactin couldn't take over. I don't know, this is my own theory'' (Participant 04LC).

Psychological barriers. Many HPs identified psychological barriers or attitudes that may affect breastfeeding, often using the phrase ''just speculating.'' HPs described that physical challenges can make daily living activities difficult, thus contributing to obese women's breastfeeding attitudes.

Self-consciousness was widely discussed by HPs. Although many HPs were ''just speculating'' about obese women's self-consciousness, others were more certain that self-consciousness played a role, noting barriers to breastfeeding discreetly. HPs described that self-consciousness and ''modesty'' created challenges for assisting with breastfeeding because of obese women's ''embarrassment'' about removing clothing.

Lack of confidence was perceived as a reason that obese women breastfeed less: ''obese women are less likely to give breastfeeding a good try'' because they ''lack confidence in their body's ability to do what it needs to do.'' Although they were ''totally generalizing,'' a few believed that obese women tend to have lower motivation to breastfeed. It is important, however, that most who suggested low motivation also discussed an ''everything is harder'' sentiment, suggesting that breastfeeding is just not a priority for women faced with many medical and physical challenges.

Social barriers. Many HPs talked about obesity being intertwined with complex social circumstances affecting breastfeeding success, including low socioeconomic and education levels, culture, or race and ethnicity. Especially among those who primarily provided care for women of lower socioeconomic status, it was difficult for HPs to distinguish between social factors and obesity as causes of poor breastfeeding outcomes. Although some HPs could not distinguish obesity from other social circumstances, some believed that social circumstances were more important barriers than obesity. Furthermore, HPs believed that there was lower social support among women from low socioeconomic status and certain race/ethnicity groups, indirectly linking obesity to lower social support for breastfeeding.

Theme 3: challenges for HPs

Obese patients require "more." Across professions, HPs talked about providing care to obese women as involving ''more''—more time, more physical effort, and more challenges (Table 3). Caring for obese patients was described as ''hugely time-consuming.'' One midwife talked about spending extra time because of ''a lot of comorbidities and

Table 3. Subthemes and Categories That Emerged in Theme 3 (Challenges for Health Professionals), with Example Quotations

Theme, subtheme	*Category*	*Example quotations (participant)*
Challenges for health professionals		
Obese patients require ''more''	Time consuming	''Breastfeeding takes a back seat to comorbidities in pregnancy so the breastfeeding becomes a little bit less important …'' (16MD)
	Physical effort	''It's more work for the mom, more work for the nurse…physically more work.'' (15CNM)
		''… your back is breaking because you're leaning over them…it's more difficult for the healthcare worker when [women are] obese, too, because it's strenuous on our bodies, the positioning, the work we have to do.'' (02RN)
	More challenging	''And you just have to keep trying different things…because I remember one not too long ago, it was 'oh my gosh, how do I get this to work?'' (12LC)
		''… It's a little bit easier to have a patient who is not attempting to breastfeed and they've got enormous pendulous breasts and you've got positional, you know, issues with the patient.'' (05RN)
Awareness of stigma and need for sensitive care	Stigma awareness	''… obese people often start to pull back from the medical world because there's so much discussion about the weight loss.'' (03LC)
	Normalizing/ minimizing obesity	''Well, if the breasts are a little bit larger and they've got challenges with their nipples, I'll say like 'Oh my gosh, a lot of women have that problem,' you know…but I guess normalizing. I use that technique a lot.'' (05RN)

other problems that need attention and you can't ignore.'' Because of the extra time needed to address obesity-related comorbidities, breastfeeding discussions were sometimes not a priority. This was particularly true among providers who cared for higher-risk patients, where ''sometimes breastfeeding takes a back seat.''

HPs who provided care for women in the hospital or peripartum talked about obese women requiring more physical effort, which causes a ''strain on healthcare,'' and may require ''extra hands'' to provide care. The extra physical work to assist was ''more work for the mom, more work for the nurse…physically more work.''

Providing care for obese women was described as more challenging: ''we dread those patients'' because ''it's so hard to take care of them.'' Similar sentiments were expressed about providing breastfeeding care. Helping obese women breastfeed was challenging because it required ''more tweaking'' and more trial and error to find successful positions for breastfeeding. Providing breastfeeding assistance for obese patients who were self-conscious posed further challenges.

Awareness of stigma and sensitive care. HPs described either explicitly or implicitly an awareness of obesity stigma. Explicitly, they described that obesity causes discomfort in the patient–provider relationship. Implicitly, awareness of obesity stigma was evident in the way HPs talked or responded to certain questions. Some initially hesitated in answering questions about their experiences with obese patients, seemingly from fear of sounding discriminatory. Also, many HPs were very careful in their language and verbally noted when they were ''generalizing'' when they talked about characteristics of obese women, their challenges, or their level of commitment to breastfeeding.

It was clear that HPs were aware of general strategies to use with obese patients.[15] ''I treat them the same'' was a widely used approach, as well as ''not acting like they're different'' or not making obesity an issue. Some expressed awareness of ''modesty'' and were sensitive to ''using gentle language and asking permission to touch.'' Language that normalized obesity and minimized obesity's relationship to challenges was also used.

Theme 4: improving breastfeeding care for obese women

In discussing how breastfeeding-related care for obese women could be improved, many HPs weren't sure what to do and felt they needed more education. HPs believed they could learn more about how breastfeeding benefits obese mothers and strategies to help them: ''… we don't often separate out the obese women in our counseling. And maybe we should, maybe there's more data out there that we should know about, or ways that we could help them'' (Participant 07CNM).

In addition to their own education, HPs thought breastfeeding care for obese women could be improved by preparing women better during pregnancy. Nurses and lactation consultants thought that prenatal breast exams would be helpful to ''look at women's shape of their breasts and the shape and size of their nipples'' and address flat nipples before delivery. They also thought obese women could be taught specific positions before delivery that might work better for them, ''because if they're trying the standard things and they're not working [on the day baby is born]…that's a day where it's stressful.'' In some cases, such as women who have undergone breast reduction, HPs suggested establishing care with a lactation consultant before delivery. Other HPs suggested obese women would benefit from postpartum home visits, to assist with physical aspects of breastfeeding ''… because you think, gee, when they get home, how are they gonna be able to, to do this?''

Discussion

This study identified many challenges for breastfeeding that HPs perceive as more common among obese women and challenges that they themselves face when providing care. Some challenges identified here have been reported previously, including large breasts, flat nipples, and difficulties with positioning and latching.[16] HPs also described challenges that have not been previously identified, including general physical difficulties related to mobility. Limited mobility impacts breastfeeding both directly, by posing positioning challenges, and indirectly, by increasing physical exertion and exhaustion. Mobility problems that are present before pregnancy and delivery not only persist but are often compounded by high rates of cesarean delivery (60% higher for obese and 200% higher for morbidly obese [BMI ≥ 35 kg/m^2] women).[17]

Challenges that HPs encountered with obese women also affected breastfeeding care. HPs felt that caring for obese women required more time and work in a setting with limited resources, a theme similar to challenges identified in maternity settings[18] and reflective of additional considerations required for providing their maternity care.[19] HPs also felt obese women were more difficult to care for because of their complex medical issues and difficulties with finding successful breastfeeding positions. The combination of an obese woman's concern for exposing her body, general exhaustion, and a difficult postpartum course posed more challenges. Despite HPs' best efforts, weight-stigmatizing attitudes were still evident and seemed to result in part from the extra work required. These findings help explain why Mulherin et al.[20] found that even maternity care providers with few weight-stigmatizing attitudes had less positive responses to obese patients.

It is surprising that HPs defined obesity in different ways. Typically, descriptions that were not in accord with standard cutoffs were consistent with extreme obesity. Thus, some HPs seem similar to the general population, where perceptions of normal have shifted toward higher BMIs.[21] Discrepancies in obesity identification are important because not only *obese* but also *overweight* women are at high risk of early breastfeeding cessation. Duration of breastfeeding decreases in a dose–response relationship above the normal weight category such that extremely obese women have the shortest duration.[22] Use of tools to help clarify the degrees of obesity[23] and large breasts[9] that HPs discuss as problematic could help to clarify this understanding.

Varying levels of understanding about the impact of obesity on breastfeeding were present. This could be attributed to low saliency about the challenges obese women face or HPs' attempts to avoid generalizing problems. It could also result

from the lack of awareness about current evidence of shorter breastfeeding duration among obese women and about obesity-related delayed lactogenesis II, a well-established risk factor.[5] Regardless of the reasons, these HPs did not frame breastfeeding as a medicalized phenomenon—obesity was not broadly discussed as a risk factor for poorer breastfeeding outcomes. This is contrary to the framing of obesity in pregnancy, which has been highly medicalized.[24] Indeed, HPs easily listed many obesity-related pregnancy or delivery problems. However, when it came to breastfeeding, the sentiment that ''[obese women] can be just as successful as anybody else'' occurred frequently. This lack of medicalization is potentially both beneficial and detrimental—beneficial because a lack of preconceptions that obese women are more prone to failure could facilitate more positive interactions, and detrimental if obese women are not receiving targeted care that could increase their breastfeeding success. The latter effect deserves attention given the ample evidence that obese women are less likely to continue breastfeeding.[3,4,22] In fact, the Academy of Breastfeeding Medicine's recently revised ''Going Home Protocol'' now lists obesity as a risk factor that should be assessed to anticipate breastfeeding problems.[25] Interventions to date have been unsuccessful at improving breastfeeding outcomes[26,27]; thus, more research is needed to determine what targeted care for these women should include.

Sociodemographic circumstances were widely noted by our participants as risk factors for early breastfeeding cessation and consistent with an ample body of evidence that women of low socioeconomic status, low education, and certain ethnicities—especially African Americans—have lower breastfeeding rates.[28,29] Complicating the picture is that obesity is also higher among these groups.[30] It is notable, however, that disparities in obesity rates by socioeconomic status have narrowed over recent decades, as the prevalence has increased faster in higher-income and socioeconomic groups.[31] Distinguishing between the barriers for obese women that we identified from risk factors specific to some sociodemographic groups will facilitate better targeting of breastfeeding care.[32] Additional studies to distinguish barriers to breastfeeding that obese mothers themselves experience would be helpful.

The qualitative design of this study facilitated collection of new information. Given the range of practice settings, our findings contribute to better understanding of care for obese women who choose to breastfeed. Furthermore, the inclusion of a variety of HPs provided a broader view for understanding the diversity of challenges and strategies in providing breastfeeding-related care for obese women throughout the care continuum. We did not have enough of each type of HP to identify specific barriers for each type of HP, nor was this our aim. However, determining HP-specific challenges and strategies could facilitate better educational targeting.

Conclusions

In summary, many HPs may not recognize obesity as a risk factor for delayed onset of milk production or early breastfeeding cessation despite their ability to identify multiple challenges that obese women have with breastfeeding. It is important that HPs identified challenges that they themselves encountered in providing care prenatally and intra- and postpartum with strains on and constraints in the healthcare system related to time and resources as central issues. Education for HPs about breastfeeding among obese women could increase awareness of the significant risk of poorer breastfeeding outcomes for women with BMIs above the normal-weight range. Comprehensive strategies are required in the healthcare system to address the challenges of time and resources for providing breastfeeding-related care to obese women.

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Disclosure Statement

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Appendix: Interview Guide Questions

''What is your role in working with women who breastfeed/plan to breastfeed?''
''What is your experience working with obese women who breastfeed/plan to breastfeed?''
''What do you consider 'obese'?''
''How do obese women differ from women of normal body weight?''
''What are some of the problems/challenges obese women encounter [for breastfeeding]?''
''What kinds of advice or support do you offer for obese women?''
''What approaches do you use with obese women who want to breastfeed?
''Are there any approaches that you feel *could* be useful to help obese women?''
''What are some of the ways you feel *you* might be able to help obese women with breastfeeding?''