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Postpartum Weight Self-Management: A Concept Analysis

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Abstract

Aim: The aim of this concept analysis is to create a clear definition and framework to guide weight self-management research and promotion of healthy weight self-management during the postpartum period. **Background:** A woman's ability to manage her weight through the postpartum transition has lifelong implications for her weight status. **Methods:** This concept analysis was guided by Walker and Avant (2005). A broad search of sources was performed, yielding 56 articles in which postpartum weight self-management was the main focus. **Results:** From consideration of the attributes of postpartum weight self-management, a descriptive, situation-specific theory emerged: Postpartum weight self-management is a process by which the transition to motherhood is viewed by the woman as an opportunity to intentionally engage in healthy weight self-management behaviors by minimizing the salient inhibitors and maximizing the salient facilitators to action. **Conclusion:** This analysis provides a clarification of the process concept of postpartum weight self-management and its consequences, giving direction for measurement, clinical application, and further research. Future nursing

interventions and research should be aimed at helping women to view the postpartum period as a normative transition in which they have the opportunity to take charge of their own health and the health of their family.

Weight management among childbearing women is an important problem that has been widely studied, but conceptual problems remain as researchers and providers work to incorporate this concept within health promotion for postpartum women. The current body of literature reveals that the responsibility for achieving the desired health outcome of weight loss can lie with women, with providers, or with both. There is currently no consistent description of the process by which women manage their weight during this period or when loss of gestational weight should be measured. The aim of this concept analysis is to create a clear definition and framework to guide weight self-management research and promotion of healthy weight during the postpartum period.

BACKGROUND

Overweight and obesity are worldwide problems for women's health. Countries on every continent have an overweight prevalence of between 65% and 80% for adult females, and an obesity prevalence of between 35% and 50% (World Health Organization, 2011). Overweight and obesity are significant concerns for women and for their health care providers because women exceeding normal weight parameters are at higher risk for health problems such as heart disease, stroke, type 2 diabetes, gallbladder disease, and some cancers as well as increasing severity of hypertension and musculoskeletal problems (Manson, Skerrett, Greenland, & VanItallie, 2004). Women who are overweight or obese are also at risk for adverse reproductive outcomes, including infertility, hypertensive disorders of pregnancy, gestational diabetes, and increased risk of delivery by cesarean section. A mother's overweight or obese status can also increase the risk of fetal complications such as macrosomia, intrauterine fetal death, and increased neonatal admission to a neonatal intensive care unit (Arendas, Qui, & Gruslin, 2008).

The postpartum period is a unique time of developmental and physical change for women. As women navigate the postpartum transition, they are faced with many challenges within the context of their new or expanded motherhood role (Meleis, Sawyer, Im, Hilfinger Messias, & Schumacher, 2000; Mercer 2004). Childbearing and postpartum weight retention have been identified as important contributors to obesity (Johnson, Gerstein, Evans, & Woodward-Lopez, 2006). If women retain weight gained during pregnancy past the postpartum period, they are more likely to be overweight or obese later in life than women who return to prepregnancy weight (Amorim, Linne, & Lourenco, 2008; Linne, Dye, Barkeling, & Rossner, 2004; Rooney, Schauburger, & Mathiason, 2005; Walker & Avant, 2005). It is imperative that researchers and providers have a clear understanding of the concept of postpartum weight self-management to provide a framework for developing effective strategies that will promote women's engagement in weight self-management strategies, return to prepregnancy weight, and improvement in lifelong health.

METHODS

This concept analysis was guided by the Walker and Avant (2005) method. This method is an iterative process in which a researcher identifies a concept of interest, determines aims, and conducts a broad review of the literature to identify all possible uses of the concept. The process continues with

identifying and defining attributes, identifying antecedents and consequences, presenting model cases as well as cases that demonstrate what the concept “is not,” and finally, defining empirical referents (Walker and Avant, 2005, p. 65).

DATA SOURCES

To identify all relevant literature, a broad search was performed by CINAHL, MEDLINE, PsycINFO, and ProQuest Digital Dissertations for a 7-year period from 2005 to 2012. Search terms used were “postpartum” or “postnatal” or “after birth” combined with “weight management” or “self-management” or “self-monitoring” or “weight loss” or “weight retention.” The search initially returned 224 articles, which were reviewed to select those for which postpartum weight self-management was identified as the main topic of the article, either in the title or in the abstract. The reference lists of these selected articles were reviewed to find relevant articles that may have been missed by the database searches. Several classic articles relevant to the topic were then added to this list. This thorough search resulted in 56 articles.

Once the 56 articles were found, each was read thoroughly to identify how the concept was used. Each unique point was extracted and entered into a table with its reference information linked to it. As points began to organize and attributes emerged, each point was coded with the attribute to which it corresponded. After each point was coded, a sort was performed and the points were all cross-checked to be sure they all resonated with the attributes and the concept itself.

RESULTS

The concept of postpartum weight self-management was examined among a wide range of disciplines: nursing, medicine, public health, behavioral medicine, nutrition sciences, exercise sciences/kinesiology, social work, biology, and epidemiology. Several countries and different populations within the United States were represented in the body of literature reviewed.

Defining Attributes

Transition as Opportunity.

No matter the differences between women, the transition to motherhood is always one of significant physical and emotional changes (Olson, 2005). The postpartum transition may occur differently depending on whether a woman is becoming a mother for the first time or is having a child after already being a mother (Bastian et al., 2010; George, 2005); or whether she has sufficient social and instrumental support (George, 2005; Morrison, 2009). Postpartum weight self-management is influenced by attitudes and behaviors women demonstrate before and during pregnancy, creating a trajectory of beliefs and behaviors across the perinatal period that influence this transition (Fowles & Walker, 2006; Linne & Neovius, 2006; Linne & Rossner, 2003; Oken, Kleinman, Belfort, Hammitt, & Gillman, 2009; Pereira et al., 2007; Shrewsbury, Robb, Power, & Wardle, 2009; Tuffery & Scriven, 2005).

The postpartum period is important to women’s lifelong health because the transition is an opportunity for self- or provider-initiated health promotion. During the postpartum period and the period immediately preceding the birth of a woman’s child, a woman has frequent contact with health care providers. The time following the birth of a baby is a “teachable moment” because it is a time in

which emotion is increased, perceived risk and potential for positive outcomes are increased, and social concept or social role of the woman is redefined (McBride, Emmons, & Lipkus, 2003; Mercer, 2004). The frequent points of contact with health care providers are times when health care providers could provide the knowledge, support, or referrals to other resources women might need to successfully self-manage their weight after the birth of their baby (Lambert et al., 2005; Østbye et al., 2008; Phelan, 2010).

Despite the fact that many women are concerned about weight loss, providers often do not address weight loss in the immediate postpartum or at the follow-up visit (Ferrari et al., 2010; Ohlendorf, Weiss, & Ryan, 2012), and most women then have no further interaction with health care providers until a future annual appointment or until they are pregnant once again (Moos et al., 2008). Failure to address women's weight loss concerns during the childbearing period and in the immediate postpartum period is a missed opportunity to influence a woman's lifelong health, as well as the health of any future pregnancies (Moos et al., 2008; Walker, Sterling, & Timmerman, 2005).

Inhibitors of Weight Self-Management.

Several inhibitors, part of the normative developmental transition to motherhood, can complicate a woman's engagement in weight self-management. The inhibitors of effective weight self-management are unique to each woman's circumstances. A listing of salient inhibitors extracted from this analysis can be found in Table 1.

Table 1. Inhibitors to Engagement in Weight Self-Management Behaviors in the Postpartum Period

Inhibitor	Examples	Reference(s)
Working to balance new and competing responsibilities	Care of the infant and other children, work outside the home	Albright, Maddock, & Nigg, 2009; Groth & David, 2008; Østbye et al., 2008; Pereira et al., 2007; Setse et al., 2008; Sterling et al., 2009; Thornton et al., 2006; Tuffery & Scriven, 2005; Walker et al., 2012
Lack of knowledge	Safe strategies for diet and exercise in the postpartum period, effective weight management strategies	Thornton et al., 2006
Lack of motivation		Cahill, Freeland-Graves, Shah, & Lu, 2010; Lambert et al., 2005; Sterling et al., 2009
Emotions and fatigue	Emotional eating, depressive symptoms, feelings of guilt and loneliness	Albright et al., 2009; Black et al., 2006; Fowles & Walker, 2006; Gunderson et al., 2007; Heh et al., 2008; Herring et al., 2008; Setse et al., 2008; Sterling et al., 2009; Tuffery & Scriven, 2005
Cultural practices that promote postpartum rest	“Doing the month”	Ko, Yang, & Chaing, 2008
Family or friends discouraging weight loss		Albright et al., 2009
Changed eating and exercise habits after the birth of the baby		Black et al., 2006
Altered perceptions of control over weight management	Perception that “I can’t do anything” about metabolic changes after birth, genetic influence, breastfeeding’s effects	Sterling et al., 2009
No place to exercise	Unsafe neighborhood, weather constraints, lack of transportation to an appropriate workout location	Albright et al., 2009; Walker et al., 2012
Lactation concerns	Concern about diet and exercise affecting quality or quantity of milk production	Lovelady, Stephenson, Kuppler, & Williams, 2006

Women with certain personal characteristics are more likely to encounter these inhibitors, or are more likely to lack the ability to overcome the inhibitors they encounter. Therefore, these women are less likely to adopt weight self-management behaviors and successfully lose the weight they gained during pregnancy. These characteristics include being an adolescent or older than 35 years, being part of a minority group, having more than two children, having a low income, having less than a college education, and being single (Durham 2008; Gore, Brown, & West, 2003; Oken, Taveraas, Popoola, Rich-Edwards, & Gillman, 2007; Olson, Strawderman, Hinton, & Pearson, 2003; Rubio & Montgomery, 2003; Shrewsbury et al., 2009; Thame, Jackson, Manswell, Osmond, & Antoine, 2009; Walker et al., 2004).

Facilitators of Weight Self-Management.

Many authors have identified strategies that would facilitate effective self-management of weight during the postpartum transition. Facilitators include weight management attitudes and beliefs of the woman, including weight management self-efficacy, the belief that engaging in weight management behaviors will result in weight loss, the belief that engaging in weight management behaviors during postpartum are safe, a desire to feel better, and concerns about being overweight (Downs, 2006; Evenson, Aytur, & Borodulin, 2009; Hausenblas et al., 2008; Lambert et al., 2005; Morrison, 2009; Thornton et al., 2006).

Cultural beliefs about thinness and its appropriateness after the birth of a baby may influence whether a woman prioritizes engagement in weight self-management behaviors. In a culture that values a return to prepregnancy weight shortly after birth, there can be positive peer pressure to regain one's prepregnant weight and/or lose additional weight (Groth & David, 2008). The value placed on thinness and resuming one's shape is influenced by social context. In studies of body type preferences, women in higher socioeconomic groups selected a thinner figure as their desired figure than women of medium- and low-socioeconomic status (Shrewsbury et al., 2009), and a thin appearance was reported as more important to White and Hispanic women than African American women (Groth & David, 2008), who describe a cultural acceptance of a curvier body (Im et al., 2012). This societal value on thinness has also been described as a motivator in Taiwanese women (Heh, Huang, Ho, Fu, & Wang, 2008).

Although lactation concerns were identified previously as an inhibitor, lactation can also be a facilitator of weight self-management. Several studies demonstrate that women who breastfeed make healthier diet choices (Durham, 2008; Nuss, Freeland-Graves, Clarke, Klohe-Lehman, & Milani, 2007), and there is a link between prolonged breastfeeding and less weight retained past the postpartum period (Østbye, Krause, Swamy, & Lovelady, 2010; Slotkin & Herbold, 2010).

Women can be facilitated in their efforts via receipt of instrumental and social support. Examples of instrumental support identified as facilitative of women's engagement in weight self-management behaviors include child care, financial resources, exercise equipment or fitness club memberships, transportation, reliable and safe strategies for diet and physical activity, and identification of weight loss resources already available to the woman (Ferrari et al., 2010; Hausenblas et al., 2008; Krummel, Semmens, MacBride, & Fisher, 2010; Lambert et al., 2005; Østbye et al., 2008; Slotkin & Herbold, 2010; Tuffery & Scriven, 2005). Social support was one of the most frequently discussed facilitators of weight self-management success—from family, friends, support groups, or other new mothers (Cramp & Brawley, 2009; Evenson et al., 2009; Hausenblas et al., 2008; Lambert et al., 2005; Setse et al., 2008;

Thornton et al., 2006). Women have described specific ways members of their social network can be supportive of their weight self-management efforts, including information sharing (e.g., recipes and success stories) and modeling how to make good choices in stressful situations or when eating out (Østbye et al., 2008).

Women have also indicated that they would like to involve family and children in their weight management efforts (Groth & David, 2008). This strategy is facilitative in two ways: by eliminating the barrier of a lack of childcare and also by providing companionship. Although multiparity has been identified as an inhibitor of engagement in weight self-management behaviors, it has also been identified as a factor in motivation to engage in weight self-management activities. A recent study by Bastian et al. (2010), which included 491 racially and economically diverse overweight and obese women, found that the women most highly motivated to lose weight were those with their third baby.

In conclusion, a woman's ability to adopt weight self-management behaviors in the postpartum period has been described in terms of being able to maximize facilitators of healthy behaviors and to minimize inhibitors of those behaviors (Krummel, Semmens, Boury, Gordon, & Larkin, 2004; Østbye et al., 2008).

Intentional Engagement in Weight Self-Management Behaviors.

Nearly every discussion of postpartum weight management presented the concept as a function of a woman's adoption of weight self-management behaviors. Whether a woman is able to achieve effective weight management in the postpartum period has been attributed to her engagement in healthy eating habits, sufficient physical activity, or both (Amorim et al., 2008; Borodulin, Evenson, & Herring, 2009; Keller, Records, Ainsworth, Permana, & Coonrod, 2008). One type of self-management behaviors that has been part of successful programs include specific dietary changes such as increased intake of fruits, vegetables, dairy, meat, grains, protein, and healthy fats and decreased intake of soda, sweetened beverages, French fries, chips, desserts, sweets, and fast food (de Castro, Kac, de Leon, & Sichieri, 2009; Durham, 2008). Other programs used individualized counseling combined with self-monitoring activities to influence self-management of both diet and physical activity (Kinnunen et al., 2007). More recently, researchers have begun to test ways to incorporate women's cultural backgrounds in planning weight self-management interventions (Walker et al., 2012).

For these interventions to be consistent with self-management, it is required that a woman intentionally engage in the self-management behaviors to influence the consequences of the process (Downs, 2006; Hausenblas et al., 2008; Ryan, 2009). If a woman returns to her prepregnancy weight passively, without being intentionally engaged in weight-management behaviors, that woman has experienced a positive outcome without practicing self-management. Although providers are able to provide information, influence beliefs, and provide some social facilitation, women must make the choice each day whether to engage in eating and physical activity behaviors that will positively or negatively impact their weight management (Wing, Tate, Gorin, Raynor, & Fava, 2006).

Antecedents

The concept of postpartum weight self-management is further clarified by identifying its relevant antecedents—events or incidents that occur prior to the process itself (Walker & Avant, 2005). Most sources have focused largely on antecedents that would influence postpartum weight retention as the end consequence of this process. These antecedents are a woman's gestational weight gain and her

weight status at the time of conception. These constructs may also be antecedents of the process of postpartum weight self-management, but this relationship has not been explored. There is only one well-established antecedent to the process of postpartum weight self-management: the pregnancy that immediately precedes this postpartum period (Kim, Stein, & Martorell, 2007; Walker, Sterling, Kim, Arheart, & Timmerman, 2006).

A woman's gestational weight gain is defined as the difference between her weight immediately before the birth of her baby and her prepregnancy weight. The Institute of Medicine (IOM; 2009) has published evidence-based guidelines for the amount of weight women should gain to optimize perinatal outcomes based on prepregnancy weight status (underweight, normal weight, overweight, and obese). There is a strong link between gaining more weight than is recommended during pregnancy and weight retention past the postpartum period—one of the potential consequences of the weight self-management process (Huang, Wang, & Dai, 2010; Linne & Rossner, 2003; Lyu, Lo, Chen, Wang, & Liu, 2009; Maddah & Nikooyeh, 2009; Margerison, Rehkof, & Abrams, 2010; Oken et al., 2009; Oken et al., 2007; Olson et al., 2003; Siega-Riz et al., 2009; Vesco et al., 2009; Walker et al., 2006).

The case for a woman's prepregnancy weight status (underweight, normal weight, overweight, or obese) as an antecedent to postpartum weight self-management outcomes is one that is disputed. Some reports have identified a link between prepregnancy weight status and postpartum weight retention (Nohr et al., 2009; Oken et al., 2009; Walker et al., 2006), but others have found no link (Huang et al., 2010; Linne & Rossner, 2003; Lyu et al., 2009; Maddah & Nikooyeh, 2009). The weight of the evidence demonstrates that prepregnancy weight status influences weight retention in the short- and long-term (IOM, 2009). Walker (2009) has provided further evidence that a woman's prepregnancy weight status is a stronger predictor of weight management outcomes when women are examined in clusters based on both their prepregnancy weight status and their gestational weight gain. This evidence suggests that the interaction between these two antecedents is an important relationship that requires further investigation for its effects on the postpartum weight self-management process.

Consequences

There are several consequences of the process of postpartum weight self-management. The first and most immediate is the woman's weight status after the end of the postpartum period: whether she returns to her prepregnancy weight, retains weight gained during pregnancy, or loses more weight than she had gained during pregnancy. The timing of the measurement of this consequence has been varied in the literature. Weight retention has been measured as early as 3 months and as late as 3 years after the index birth (IOM, 2009). In two long-term cohort studies that demonstrated a link between postpartum weight retention and weight status 10 and 15 years later, postpartum weight retention was measured at 6 months (Rooney et al., 2005) and at 1 year (Linne et al., 2004). Therefore, measurement at either time point appears to be valid for prediction of long-term outcomes.

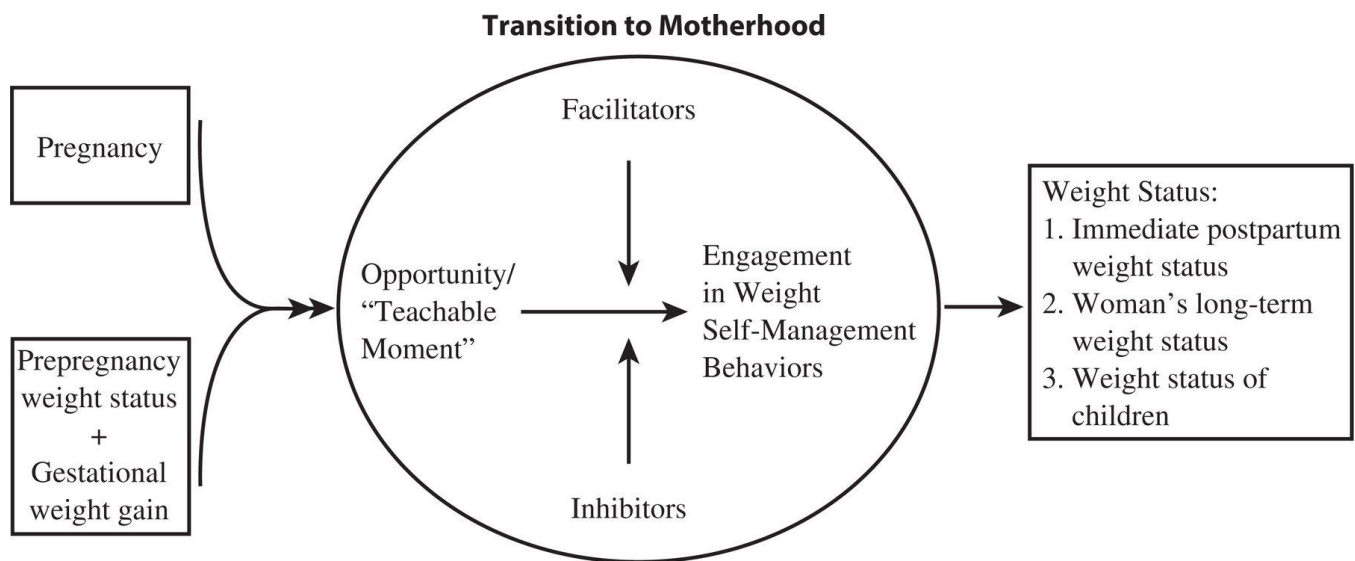
A second consequence of this process is long-term weight status. Women retain an average of 0.5–3.0 kg (1.1–6.6 lb) of weight from each pregnancy past the postpartum year (Gore et al., 2003). This long-term weight status has implications on future pregnancies and also on the woman's health throughout her life. Many women who retain weight past the postpartum period then enter a subsequent pregnancy with higher risk of retaining weight after that birth (Linne & Rossner, 2003), compounding life span risk of being overweight (Rooney et al., 2005).

A final consequence of postpartum weight self-management is a link between maternal overweight and overweight status of her children (IOM, 2009; Oken et al., 2009; Sonnevile et al., 2011). Therefore, inasmuch as postpartum weight self-management contributes to life span weight status, it also appears to contribute to the life span weight status of a woman's offspring. This final consequence is one that has only recently been examined, and will need further study to be confirmed as a consequence of the postpartum weight self-management process.

DEFINITION AND EMPIRICAL REFERENT OF POSTPARTUM WEIGHT SELF-MANAGEMENT

As a result of this concept analysis, the following descriptive situation-specific theory provides a definition of the concept: Postpartum weight self-management is a process by which the transition to motherhood is viewed by the woman as an opportunity to intentionally engage in healthy weight self-management behaviors by minimizing the salient inhibitors and maximizing the salient facilitators to action. Figure 1 provides a visual representation of the theoretical model that emerged from the concept analysis.

FIGURE 1. Model of Postpartum Weight Self-Management.



Empirical referents can be identified for each attribute of postpartum weight self-management. Both qualitative and quantitative approaches are needed to adequately access the concepts. For instance, the extent to which different women view the transition to motherhood as an opportunity for healthy behaviors requires in-depth qualitative analysis to identify patterns of response to the transition before development of quantitative measures. Quantification of patient-specific facilitators and inhibitors either through coding of narrative responses or development of instrumentation for postpartum weight self-management behaviors will be needed to investigate the moderating effects of the facilitators and inhibitors of postpartum weight self-management processes and outcomes. Reliable and valid measures that determine the level to which a woman engages in dietary and physical activity weight self-management behaviors already exist, such as the Stanford Patient Education Research Center Exercise Behaviors Scale (Lorig et al., 1996) and the Eating Styles Questionnaire (Hargreaves et al., 2003).

Theoretical Cases

Walker and Avant (2005) suggest the construction of theoretical cases which provide (a) a perfect example of application of the concept, (b) an example of what the concept is not, and (c) a case that is related to the concept and has some shared attributes with the concept, but differs in some important ways.

Model Case

A 27-year-old woman has delivered her second baby with no complications. She began her pregnancy at a normal weight and gained the recommended amount of weight during her pregnancy. She recognizes that she has an opportunity to choose healthy behaviors immediately after birth and has plans to control her portions, increase her fruit and vegetable intake, and limit her unhealthy snacks and desserts. She also has plans to start walking with her baby in a baby carrier and her 2-year-old in a stroller as soon as she returns home. She has already identified that she has the resources she needs to be successful; there is a walking path in her neighborhood, she has a friend who will walk with her, and she enjoys walking for exercise. She knows she will need an explicit plan to overcome the many inhibitors that stand in the way of her goals of adopting healthy behaviors. Eight weeks after the birth of her baby, she returns to work and finds it challenging to schedule her daily walks and to plan healthy meals and snacks, but her preplanning and support from her husband are helpful in overcoming those challenges. By 6 months after the birth of her baby, this woman finds that she has returned to her prepregnancy weight as a result of her efforts.

Contrary Case

A 19-year-old woman delivered her second baby at full-term with no complications. When she became pregnant, she was approximately 15 lb overweight and gained 40 lb during her pregnancy. After the birth of her baby, she does not feel that weight management is a priority in her life, and she had not made any plans about how she would manage her weight. She quickly becomes overwhelmed by the balance between childcare responsibilities and returning to college classes 3 weeks after the baby's birth. At her 6-week postpartum visit, she has lost 20 of the 40 lb she gained during pregnancy, and at 1-year postpartum, she remains 10 lb above her prepregnancy weight.

Borderline Case

A 25-year-old woman delivers her second child at full-term with no complications. When she became pregnant, she has normal weight, but gained 45 lb during her pregnancy. After the birth of her baby, she makes plans to eliminate her evening unhealthy snacking and to increase her intake of vegetables and fruits to lose her pregnancy weight but subsequently does not intentionally change her behavior in any way. She becomes involved in caring for her children and in a mother's group that she belongs to, and does not eat much because she is "too busy to eat." At her yearly checkup, she has returned to her prepregnancy weight.

Case Comparison

When comparing the model and contrary cases, it is clear what differs between the two. In the first case, the woman identifies her transition as an opportunity for change; in the second, no such recognition is present. The woman in the model case makes plans to minimize inhibitors and maximize facilitators to adopt weight management behaviors; the second woman makes no such plans. The first

woman does adopt the planned weight management behaviors and overcomes inhibitors, and the second does not. Finally, the first woman achieves the outcome of interest: return to prepregnancy weight within 1 year; the second woman does not. The borderline case serves to make a distinction between the process attribute of intentional engagement in weight management behavior and the consequence of weight retention. The woman in this case achieves the desired weight within the postpartum year, but did not recognize her transition as an opportunity, does not make plans to optimize her barrier/facilitator balance, and does not adopt the desired healthy behaviors.

DISCUSSION

Limitations

This analysis presents the process as one of self-management; it does not include a thorough search of provider-led strategies that would influence weight management outcomes. Further analysis could more specifically explore ways in which providers can influence a woman's weight self-management.

Although this concept analysis is based on a large body of literature, diverse in its inclusion of different populations within the United States, populations in different parts of the world, and many disciplines, some limitations exist which limit its applicability. Inclusion of articles that are in languages other than English would certainly widen the scope of applicability. In addition, the specific focus on self-management of weight by women limits the ability to apply the concept in cultures where women have differing worldviews of health. For instance, this theory would not be useful in a population where a fatalistic view of health persists.

Relevant Theoretical Perspectives

The definition of postpartum weight self-management produced by this concept analysis provides a descriptive, situation-specific theory that incorporates concepts from three middle-range theories: Transition theory (Meleis et al., 2000) provides the temporal nature of the situation-specific theory. Analyzing postpartum weight self-management within the context of transition theory acknowledges the fact that the time frame in which this concept is applicable is self-limited by the nature of the normative transition to motherhood—between 6 months and 1 year after the birth of a baby regarding clinically significant measurement of weight retention.

The Integrated Theory of Health Behavior Change (ITHBC) states that people must purposefully make the daily choices that determine the level of engagement in a health behavior, and that an individual's context, including social support and social influence, have an impact on the extent to which people will engage in the necessary health behaviors to achieve positive outcomes (Ryan, 2009). The ITHBC provides guidance for the fact that self-management of weight during the postpartum period requires intentional engagement in health behaviors that would lead to weight loss after the birth of a baby. The theory has previously been tested with postpartum weight self-management (Ryan, Weiss, Traxel, & Brondino, 2011).

The health promotion model (Pender, 2011) advocates that nurses work with clients to identify their individual determinants for adopting health behaviors—most explicitly, the facilitators and barriers to adoption. Within the framework of those determinants, nurses use behavioral counseling to promote healthy lifestyles. The combination of this model with ITHBC places nurses at the intersection between

provider influence and the woman's individual efforts toward self-management to promote women's engagement in healthy behaviors.

Because the concept of postpartum weight self-management is a process concept (Rodgers, 2000), further application and research using this concept should be tied to constructs that influence the self-management process, and ways that nurses can promote health within this process. Although there is an extensive body of knowledge that has been developed in the area of postpartum weight self-management, a synthesized perspective clarifying the conceptual issues and the temporal sequence from antecedents through the process concept of postpartum weight self-management to consequences has been provided by this concept analysis.

Practice Implications

To define this transition solely as one during which women are at risk of retaining weight leads to a paternalistic view that nurses and other health care providers are responsible for minimizing that risk. The view of postpartum as opportunity identifies points at which providers can intervene but recognizes the reality that women drive the process. Nurses working with women who began their pregnancy at an unhealthy weight can turn this teachable moment into one that will help that woman achieve a healthy weight by the end of the postpartum year—or to make progress toward achieving a healthy weight. This may mean that some women have the opportunity to lose more weight during that year than they gained in this pregnancy.

This model provides guidance for practice, identifying opportunities for health care providers to influence a woman's self-management of her postpartum weight across the childbearing continuum. The nurse could assess a woman's views about her transition to motherhood, and what part she feels weight management plays in that transition. Women may benefit from a nurse assisting them in incorporating evidence-based strategies for health behavior change such as planning and self-monitoring (Ryan, 2009).

This process can be approached from a public health perspective, using media campaigns or community-based strategies to ensure that women in the community are aware of this transition as an opportunity to adopt healthy weight self-management behaviors. This work is more important within populations of people who do not prioritize healthy weight, or who prefer a larger shape, because large-scale media campaigns are often used to create new social norms. Furthermore, nurses could work with communities to develop population-based programs to facilitate engagement in weight self-management. Nursing also has a responsibility to support policy that ensures access to reliable, affordable sources of healthy food and to safe places to engage in physical activity for the most vulnerable women.

CONCLUSION

The consequences of the management of postpartum weight are significant, and it is critical that nurses, as practitioners and researchers, have a unified model around which to organize future efforts to improve care. Informed by the combined theoretical perspectives of transitions, health promotion, and self-management, this analysis directs professional efforts toward maximizing the opportunity afforded by the transition to motherhood. Nurses working with women during this transition can view their interactions with women as an opportunity to promote health by taking into account each

woman's individual inhibitors and facilitators and helping her identify strategies to be successful in her own context. In addition, their work can be aimed at helping women to see the postpartum transition as a normative one in which they have the opportunity to take charge of their own health.

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