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Beyond Positivism: Understanding and addressing childhood obesity disparities through a Critical Theory perspective

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Abstract

Purpose—We apply Critical Theory to examine menu labeling with the aim of uncovering important implications for nursing practice, research, and policy.

Conclusions—Our critical analysis uncovers barriers to menu labeling's effectiveness, particularly for vulnerable populations. Nurses must work to minimize the impact of these barriers and optimize the effectiveness of menu labeling, in order to strengthen the fight against obesity.

Practice implications—We suggest changes, guided by this critical analysis, that can be implemented by nurses working in clinical practice, research, and policy.

Many initiatives to reduce obesity rates exist, yet they have not led to significant decreases in the prevalence of childhood obesity (Ogden, Carroll, Kit, & Flegal, 2014). The prevalence (Ogden et al., 2014) and incidence of obesity (Boelsen-Robinson, Gearon, & Peeters, 2014; Cunningham, Kramer, & Narayan, 2014) are higher among groups who are disproportionately affected by healthcare disparities, including racial/ethnic minorities and those who live in poverty. Given the persistence of this problem, particularly in vulnerable populations, it is important to think more broadly about perspectives that can inform the development of obesity interventions. One such perspective is Critical Theory (Opalinski, 2006), which primarily focuses on the influence of societal barriers on individuals' well-being (Freire, 1970; Habermas, 1984; Horkheimer, 1937). A critical evaluation of an obesity initiative would, therefore, examine the influence of societal, political, and historical factors on the success or failure of a program (Freire, 1970; Habermas, 1984; Horkheimer, 1937; Opalinski, 2006) and how these ultimately affect an individual's outcomes. Given that obesity is influenced by complex social, contextual, and cultural factors, a critical evaluation is an appropriate “outside the box” approach for the development and evaluation of obesity initiatives.

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One societal barrier to obtaining a healthy weight for vulnerable populations disproportionately affected by health disparities (e.g., lower education, low health literacy, and socioeconomic status) is the inability to understand the caloric intake of the foods they eat. "Menu Labeling," one of the most recent public policy interventions aimed at curtailing childhood obesity, is the practice of providing calorie counts on menus, with additional nutritional information (i.e., fat content) available upon consumers' request (Centers for Disease Control and Prevention, 2012). Menu labeling advocates propose that consumers can use this information to make nutritious meal choices that support a healthy body weight. The 2010 Patient Protection and Affordable Care Act requires restaurants with 20 or more locations to implement menu labeling (Patient Protection and Affordable Care Act, 2010), giving this initiative the potential to make a significant impact on obesity.

In this manuscript, we apply Critical Theory to an examination of menu labeling with the aim of uncovering important implications for nursing practice, research, and policy, with particular attention to the implications of menu labeling for childhood obesity disparities. Our goal is to motivate clinicians, nurses, researchers, and policy advocates to think more comprehensively about the problem of childhood obesity through the application of critical theory in order to reveal the strengths and shortcomings of obesity-curtailing initiatives and better inform future practice.

What is Critical Theory?

Critical Theory is a social theory used to identify and alleviate societal barriers that oppress groups of people. In a Critical Theory analysis of a health phenomenon, societal factors are examined to identify barriers to the well-being of vulnerable and disparate groups. Once barriers are identified, initiatives aimed at their elimination are advocated and implemented in order to remove the societal constraints to achieving good health (Freire, 1970; Habermas, 1984; Horkheimer, 1937). For example, a previously published critical analysis identified pouring rights contracts as a societal barrier to optimal child health (Opalinski, 2006). Pouring rights contracts, made between soft drink corporations and schools, led to the sale and promotion of unhealthy sugary beverages to students in exchange for a soft drink corporation's financial support of the school. Through an in-depth critical analysis, pouring right contracts were identified as a barrier to children's health and advocacy (via boycotts and publication of research about the harmful effects of pouring right contracts) was encouraged (Opalinski, 2006).

There are numerous societal barriers to a healthy body weight, such as lack of access to markets or retail stores that sell healthy foods, targeted advertising of unhealthy foods (Harris et al., 2013) and poor walkability in residential neighborhoods (Booth, Pinkston, & Poston, 2005; Rundle et al., 2009). Because of the inherent relationship between these barriers and individual factors such as race, ethnicity, and socioeconomic status, these barriers disproportionately affect racial/ethnic minorities and low-income individuals. A critical approach to obesity identifies these societal barriers and explores potential solutions that would cultivate a healthier environment. In order to understand the rationale for the effectiveness of applying Critical Theory to obesity to more comprehensively advocate for

changes in policy, practice, and research, an understanding of the historical perspective on approaches to obesity reduction is essential.

Before Critical Theory: Positivism and Obesity

The problem of obesity has been previously defined primarily from a positivist perspective. Positivism is a worldview based on laws, reasoning, and observation (Comte, 1880) and positivists claim that science, based upon observed facts, is the only form of true knowledge (Egan, 1997). Based on this notion of truth, positivists are not inclined to consider the potential impact of contextual factors (e.g. culture, socioeconomic status, or societal structure) in their search for knowledge. A positivist perspective focuses only on the quantifiable causes of obesity – if caloric intake exceeds caloric expenditure, then increased adiposity results and eventually leads to obesity. This perspective risks a disproportionate focus on individual responsibility, resulting in victim blaming (Moffat, 2010).

While individual caloric imbalance can result in obesity, its overall cause cannot be explained solely from this positivist perspective. Environmental and individual factors also influence calorie intake and output resulting in increased/decreased body weight. (Rutter, 2011). In fact, environmental conditions in the United States contribute to what has been coined an “obesogenic” society (Booth et al., 2005, Lake and Townshend, 2006, Lobstein et al., 2004). Contextual factors such as unhealthy school lunches (Eagle et al., 2010), insufficient access to playgrounds (Potwarka, Kaczynski, & Flack, 2008), and excessive food portion sizes (Pourshahidi, Kerr, McCaffrey, & Livingstone, 2014) present barriers to maintaining a healthy body weight.

Many nutrition initiatives are informed by a positivist perspective. However, positivism does not necessarily consider contextual or societal factors, and it may not be well suited to guide obesity programs and policies. Therefore, nutrition experts have suggested abandoning the overreliance on positivism to address obesity (Buchanan, 2004; Travers, 1997). As illustrated in Figure 1, Critical Theory is an alternative to positivism because a criticalist perspective emphasizes contextual factors as determinants of social/environmental phenomena, such as childhood obesity. Individual, family, community, and societal factors are known to contribute to childhood obesity. A positivistic approach only considers a child's individual characteristics that contribute to weight status (center circle partially shaded), ignoring other factors that may place a child at increased risk of becoming overweight, and thus only explains a partial picture of the problem. A Critical Theory approach considers individual, family, community, and societal factors that contribute to a child's weight status (center circle fully shaded), providing a more comprehensive view of the problem.

Critical Theory and Childhood Obesity Disparities

In applying Critical Theory to the childhood obesity epidemic, it becomes evident that certain groups experience greater societal barriers than others in maintaining a healthy body weight. Racial minorities (Cunningham et al., 2014; Freedman, Khan, Serdula, Ogden, & Dietz, 2006; Ogden et al., 2014) and low-income children (Boelsen-Robinson et al., 2014; Cunningham et al., 2014; Shrewsbury & Wardle, 2008) are disproportionately represented

among the 12.5 million (Ogden et al., 2014) children with obesity. From 1971 to 2002, the prevalence of overweight in 6-11 year old children increased three-fold for white children compared to a five-fold increase among black children. Among all children, Mexican American boys and Black girls experienced the largest increase in weight during this 30 year period (Freedman et al., 2006). These disparities continue to be reflected in childhood obesity prevalence rates (i.e., Hispanic, 22.4%; non-Hispanic Black, 20.2%; non-Hispanic White children, 14.1%; and non-Hispanic Asian, 8.6%), despite slight decreases in obesity rates for some age groups (Ogden et al., 2014). Although the relationship between socioeconomic status (SES) and obesity is complex (Boelsen-Robinson et al., 2014; Gortmaker & Taveras, 2014), a study with a national representative sample of children revealed that kindergarten to eighth grade children from the wealthiest 20% of families had the lowest cumulative incidence of obesity (Cunningham et al., 2014). Moreover, Shrewsbury and Wardle (2008)'s systematic review found a negative association between SES and children's adiposity. As a result of these obesity disparities, low income and racial/ethnic minority children are at higher risk for hypertension, left ventricular hypertrophy, atherosclerosis, metabolic syndrome, Type II Diabetes, asthma, obstructive sleep apnea, nonalcoholic fatty liver disease, musculoskeletal issues, and depression during childhood (Daniels, 2006; Dietz, 1998; Lee, 2009; Must & Strauss, 1999).

Obesogenic Restaurant Environment

When considering potential causes of obesity rates in vulnerable populations from a societal perspective, it is important to consider the increasing amount of food consumed outside the home. In a study of children 2 years of age, researchers documented nearly a two-fold increase (18% to 32%) in the amount of calories consumed from away-from-home-dining (AFHD) during a one year period (Guthrie, Lin & Frazao, 2002). This is not surprising, as Americans spend 47% of their food expenditures on restaurant food (National Restaurant Association, 2014). In another study (Powell, Nguyen, & Han, 2012), children (2 to 11 years) and adolescents (12 to 19 years) were surveyed about their 24 hour dietary history and more than one third of children and adolescents (39% and 41%, respectively) had eaten fast food in the past 24 hours (Powell et al., 2012). Moreover, researchers have reported that 1 in 5 adolescents eat fast food three or more times per week (Larson et al., 2014).

The increasing amount of food eaten outside the home is of particular concern because of the poor nutritional environment of restaurants. Food eaten outside the home is higher in sodium, calories, and saturated fat and lower in micronutrients (Lin et al., n.d.). Consumption of restaurant food has a negative impact on adolescents' (Niemeier et al., 2006) and children's (Bowman et al., 2004) diets, resulting in greater intake of calories, soda, sugar, total fat, and saturated fat (Powell & Nguyen, 2013). According to the *20th Annual Eating Patterns in America Survey*, the restaurant foods most ordered by children were pizza, French fries, chicken nuggets, hamburgers, and ice cream (as cited by The Keystone Center, 2006). A critical analysis identifies the fact that fast food restaurants may be more accessible to vulnerable populations, as these establishments are more common in low-income neighborhoods and neighborhoods with higher concentrations of ethnic minorities (Fleischhacker, Evenson, Rodriguez, & Ammerman, 2011). Because restaurant food is often unhealthy, it is unsurprising that frequent consumption of fast food and proximity to fast

food restaurants has been linked with greater body weight (Alviola Iv et al., 2014; Boggs et al., 2013; Bowman et al., 2004; French, 2000; Kruger et al., 2014; Lin et al., n.d.; Newman et al., 2014; Niemeier et al., 2006; Pereira et al., 2005; Shah et al., 2014).

Exacerbating the problem, restaurants invest in food advertising, often promoting unhealthy products. In 2007, the McDonalds corporation spent 2.7 times as much on advertising as all fruit, vegetable, bottled water, and milk advertisers combined (Harris et al., 2013). In 2012, fast food television advertisements were viewed 2.8 times daily by preschoolers, 3.2 times daily by school aged children, and 4.8 times daily by teens, with exposure to these ads increasing from 2007 to 2009. Black children and teens saw 50% more ads than their white counterparts (Harris et al., 2013), which is of particular concern due to higher obesity rates in black children (Ogden et al., 2014).

Due to an observed link between AFHD, poor diet, and obesity (Alviola Iv et al., 2014; Boggs et al., 2013; Bowman et al., 2004; French, 2000; Kruger et al., 2014; Lin et al., n.d.; Newman et al., 2014; Niemeier et al., 2006; Pereira et al., 2005; Shah et al., 2014), clinicians and public health leaders have been targeting AFHD in the fight against childhood obesity. One result of this fight was the passage of federal legislation within the 2010 Patient Protection and Affordable Care Act that required menu labeling.

Critical Analysis of Menu Labeling

Menu labeling is designed to counteract the effects of the societal factor of the obesogenic restaurant environment. It is based on the assumption that nutrition information will help individuals, such as parents and children, choose healthier options when selecting restaurant meals (United States Department of Health and Human Services, 2011). The American Heart Association, American Public Health Association, Center for Science in the Public Interest, and American Academy of Pediatrics support menu labeling while noting the need for additional research on its effectiveness (American Heart Association, n.d.). To date, researchers have reported modest or no effects of menu labeling on calories selected or consumed (Sinclair, Cooper, & Mansfield, 2014; Swartz, Braxton, & Viera, 2011), with a meta-analysis finding non-significant changes of -31 calories ($P=0.35$) and -13 calories ($P=0.61$), respectively (Sinclair et al., 2014). It has also been hypothesized that restaurants may decrease calorie content of menu items in response to menu labeling regulation; however studies of this demonstrate conflicting results (Bleich, Wolfson, & Jarlenski, 2014; Wu & Sturm, 2014). Existing evidence is insufficient (Sinclair et al., 2014; Swartz et al., 2011) and research is ongoing.

Menu labeling assumes that consumers have nutrition knowledge to make healthy meal choices. However, studies have found that consumers are unable to interpret menu or nutrition labels (Cohn, Larson, Araujo, Sawyer, & Williams, 2012; Helfer & Shultz, 2014; Rothman et al., 2006; Vanderlee, Goodman, Yang, & Hammond, 2012). Nutrition information cannot benefit those who are unable to interpret it. This is supported by research that uncovered a relationship between low health literacy and obesity (Chari, Warsh, Ketterer, Hossain, & Sharif, 2014; Lassetter et al., 2014). Moreover, consumers with high school education or less may be less likely to notice and apply menu labeling information

compared to those with college education (Breck, Cantor, Martinez, & Elbel, 2014). A recent meta-analysis found that menu labeling only decreases calories ordered and consumed (-67 (P=0.008) and -81 (P=0.007), respectively) if contextual or interpretative information is provided to supplement the calorie count (Sinclair et al., 2014). For example, menu labeling may provoke further confusion when a range of calories is presented for a single item, such as a range of 320-540 calories for a breakfast sandwich (Cohn et al., 2012). As a result, consumers may not be able to ascertain how to customize their sandwich to create a 320-calorie meal, instead of a 540-calorie meal.

Menu labeling also requires that consumers have mathematical skills to apply to nutrition information. However, calculations may pose problems for certain groups, such as those with low socioeconomic status (Cohn et al., 2012) who are more likely to experience barriers to education (American Psychological Association, 2014). Teenage children or adults with low levels of education may find it difficult to monitor the number of calories needed throughout a day relative to their baseline metabolic needs and physical activity. Consider the following example of an obese teenage boy who weighs 80 kilograms and is 163 centimeters tall. His ability to make a wise menu choice requires knowing: 1) his daily caloric needs, 2) how many calories he expects to expend during the day, and 3) how many calories he should restrict (or expend) to bring his body mass index into a healthy range. However, this knowledge alone will not be enough to support his choices; he needs the skills to calculate how these values relate to one another, and then calculate how the calories in the menu choice fit with his needs. This may be difficult for many teenagers because 76% of American students do not have proficient math skills by the twelfth grade (Institute of Education Sciences & National Center for Education Statistics, 2014).

Lastly, menu labeling assumes that individuals are concerned enough about health conditions, such as childhood obesity, to apply the nutritional information. Parents often underestimate their child's weight (Lundahl, Kidwell, & Nelson, 2014; Tompkins, Seabloom, & Brock, 2014) and thus, may be unaware of their child's unhealthy weight. Furthermore, parents may not consider an unhealthy body weight in childhood to be a serious health risk (Adams, Quinn, & Prince, 2005; Lampard, Byrne, Zubrick, & Davis, 2008), particularly in certain cultures. For example, Black Somali parents have been found to perceive heavier body weights as "healthy," when compared to Asian British and Chinese parents. Only 12% of White British parents believe that most overweight children will grow out of their weight, compared to 37% of Black African (Trigwell, Watson, Murphy, Stratton, & Cable, 2014). In addition, Latina women may favor larger body sizes for their children, even when preferring thinner body size for themselves (Contento, Basch, & Zybert, 2003). If parents are not concerned about their child's weight, the provision of nutritional information may not persuade them to make nutritious meal choices at restaurants.

Suggestions for Change

This analysis demonstrates three key contextual issues that may inhibit the effectiveness of menu labeling and are targets for change: 1) lack of nutritional knowledge which renders the nutrition information less useful or useless, 2) lack of skill which limits the application of nutrition information, and 3) lack of understanding about the presence and implications of

childhood obesity which hinders desire to use the nutritional information. Considering these barriers from a critical perspective, nurses can focus on the societal issues that are ripe for change and avoid the individualistic, positivistic approach that can lead to victim blaming of vulnerable groups.

Lack of Nutritional Knowledge

The first issue arises because consumers must have baseline nutritional knowledge in order to apply the information provided by menu labeling. A critical approach would consider this problem from the consumers' perspective in order to identify and address this potential knowledge deficit. For example, pamphlets and posters with information on nutritional needs would be available in multiple languages and written to address both variations in education and health literacy. Resources such as the Plain Language Action and Information Network can assist with expert development of such materials (PlainLanguage.gov, n.d.). Influence of such educational materials on the effectiveness of menu labeling would require evaluation; nevertheless, the use of such materials merits discussion as a potential method to assess the current effectiveness and optimize the use of menu labeling.

When considering lack of nutritional knowledge, it is important to consider the underlying causes. Corporations who profit from the sale of non-nutritious food that “addict” customers to sugar, fat, and salt do not benefit from a well-informed public that makes meal choices out of concern for optimal health. When consumers read a menu label and discover the poor nutrition content of restaurant food, they gain the nutritional knowledge to make healthy decisions. This benefits the consumer, but harms corporations who profit from selling nutritionally deplete food. This conflict of interest is evident in the political behavior of the National Restaurant Association, the industry's trade group. The organization has lobbied against providing the calorie counts for their menu items. It sued states for proposed label regulations and fought (and defeated) thirteen menu labeling bills across the country (The Center for Media and Democracy, 2014). This behavior raises questions about why these corporations want to keep the nutritional content of their food hidden from consumers.

Lack of Skill

A lack of mathematical skills needed by consumers renders menu labeling information inaccessible. Some consumers may be unable to multiply, divide, add, and subtract the calorie content of foods in order to make healthy food selections. This may be particularly true for groups who experience obesity disparities, as racial minorities and low income children are more likely to receive substandard education and are at-risk for poor education outcomes (American Psychological Association, 2015; National Center for Education Statistics, 2007). A critical approach aims to remove the complexity of menu labeling in order to make the information more accessible to customers with all levels of education. One way to simplify menu labeling is to use a traffic-light color code scheme to identify the least (red), moderately (yellow), and the most (green) healthy foods. This approach is similar to the Traffic Light Diet that has been used by Epstein and colleagues which has been found to be more effective than numeric menu labeling in guiding participants to make healthy choices (Ellison, Lusk, & Davis, 2013). The Traffic Light Diet has also been used to guide participants' eating decisions in home-based family childhood obesity interventions

(Academy of Nutrition and Dietetics, 2006). A similar system is used in the United Kingdom (National Health Service, 2013); however its effectiveness is unknown (Dodds et al., 2014; Hieke & Wilczynski, 2012; Sacks, Tikellis, Millar, & Swinburn, 2011; Sonnenberg et al., 2013).

It may be easier for youth to understand a traffic light scheme than to analyze numeric caloric nutrition information. However, this strategy requires awareness of the varying nutrition requirements of different individuals. For example, a physically active individual might designate high calorie food as “green” whereas a sedentary individual may rate the food item as “red” because of their relative caloric requirements. Regardless, if developed, an evidence-based color coded menu labeling scheme should be guided by a consumer-centered participatory approach informed by Critical Theory. Of note, a longer term solution would include changes to the education system and policies that help perpetuate education inequality; a discussion of those factors is outside the scope of this article.

Lack of Awareness

The effectiveness of menu labeling may also be hindered by lack of awareness about healthy childhood body weight and health implications of childhood obesity. This lack of awareness necessitates community-based education focused on recognizing childhood obesity and implementation of evidence-based programs that promote maintenance of a healthy body weight. Because weight perceptions can vary by culture, all teaching must be conducted with the realization that a healthy body image is not perceived the same by all groups. It is the role of pediatricians, pediatric and family nurse practitioners, school health nurses, community health nurses, dietitians, and teachers to help children and parents understand the importance of a healthy weight. This can be done in a culturally sensitive manner by respecting and balancing the community's cultural perceptions and their need for knowledge about the science underlying childhood obesity. It can be done not only in the healthcare settings in which the power often lies with the healthcare provider, but also in community settings that are more neutral (i.e., church social events, community centers). Parents who recognize an unhealthy weight and understand the health implications of childhood obesity will be more likely to consider healthy meal choices at home and at AFHD.

Implications for Nursing

Nurses are well poised to address the problem of childhood obesity. Nurses' unique role encompasses clinical practice, research, and policy advocacy, and there is potential to apply a critical perspective to each of those areas. Calls exist for biomedical and critical approaches to be joined in managing childhood obesity (Moffat, 2010); nursing's holistic paradigm and focus on patient advocacy makes nurses well-suited to lead this work.

Implications for Nurses in Clinical Practice

By nature, nurses in clinical practice routinely provide care in a manner that reflects a Critical Theory approach. During patient assessment, nurses collect information on contextual factors that impact health, such as family support and patients' readiness to change health behavior. Based on this data, they tailor health education to meet the needs of

patients and communities. Patient education differs based on individual patients' literacy levels, motivation to learn, and clinical condition. Nurses are sensitive to socioeconomic or cultural barriers that may be faced by each patient.

An example of critically-guided patient education arises from our previous example in which an obese teenage boy is unable to use menu information to calculate his caloric needs. Let's imagine he also has type II diabetes and meets with the school nurse on a regular basis for diabetes education. During the nurse's assessment, she learns that the child faces individual and contextual barriers that make it difficult for him to maintain an ideal weight given his condition. The child shares that he usually has money to stop at McDonalds for a small order of fries, but even a piece of fruit can cost more than the fries. His mother can only provide him with a few dollars each day, as she is a single parent working two minimum wage jobs in order to support her three children. He also tells the nurse there isn't a neighborhood supermarket and the convenience stores don't regularly stock fresh fruit. Moreover, there are few safe places to play basketball and other sports in his neighborhood; he often sees "trouble" in the park and he knows that the police are often called there. Based on this and other information, the nurse puts together a teaching plan focused on healthy fast food options (i.e., choosing water versus a soft drink, asking for a side of fruit instead of fries, or ordering a child size instead of a regular adult meal) and extracurricular activities (i.e., providing a schedule of community-based after school sports programs).

Guided by a critical perspective, the nurse realizes that the barriers this child faces arise from barriers to well-being in his community and society. In addition to providing individual patient education that is sensitive to these barriers, she also advocates for system-level changes for these barriers. For example, she is a member of a local community group that advocates with the city council for Healthy Options in the Community. She attended the most recent Town Hall to urge members of the council to require fruit and vegetable carts to be placed within school zones, similar to the initiative in New York City that placed "Green Carts" in neighborhoods that reported the lowest rate of fruit and vegetable consumption (New York City Department of Health and Mental Hygiene, 2015). She also works with the high school's community service clubs to organize a spring park clean up, with the hopes of providing safe and appealing areas for physical activity for children in the community. In coordination with the local parks department, she brings student volunteers to the park nearest the school to pick up litter, rake leaves, and plant flowers. Despite these activities requiring additional time commitments outside of her scheduled hours, she is passionate about participating in them, because she knows that change to the local society and community are needed in order for her students maintain a healthy lifestyle in an unhealthy environment.

Implications for Nursing Research

Nurse scientists often apply a critical approach to research, though their approach is often not formally acknowledged as such. Rather, descriptions such as participatory action research, action research, or research based in feminism are used to identify this research (Fontana, 2004). A critical approach is natural to nursing, as nursing science often focuses

on alleviating contextual barriers to health. Tremendous opportunity exists for nurse scientists to use Critical Theory to advance effective interventions targeted at obesity.

The Patient-Centered Outcomes Research Institute (PCORI) promotes a critical approach to research. PCORI supports engaging communities, including patients, families, and stakeholders, as partners with researchers in the pursuit of discovering effective health care interventions and practices (Patient-Centered Outcomes Research Institute, 2014). Including patients, family members, and stakeholders as members of the research team can ameliorate the gap between the needs of community and the research agendas of scientists. Research with a patient focus can ensure that barriers to health are defined by those who experience it – patients. Accurate identification of patients' barriers to health can assist researchers in developing effective, targeted solutions.

Implications for Health Policy

As advocates in the care of individuals, families, communities, and populations, nurses can promote the implementation and evaluation of obesity policies informed by a critical perspective. Such policies are likely to protect, promote, and optimize changes in the environment that support the overall health and reduce healthcare disparities.

Though not legislation in itself, the Dietary Guidelines for Americans directly impact society's nutrition, by guiding Federal nutrition policy, education, outreach, and food assistance programs used by consumers, industry, nutrition educators, and health professionals (Office of Disease Prevention and Health Promotion, 2015). As advocates, nurses can engage in discussions about the Dietary Guidelines in order to help ensure promotion of high quality nutrition at the federal level, particularly because these guidelines risk being influenced by special interest groups in the food industry (Nestle, 2015). The Dietary guidelines are updated every 5 years per the National Nutrition Monitoring and Related Research Act (Office of Disease Prevention and Health Promotion, 2015) in a process led by nutrition and disease prevention experts on the Dietary Guidelines Advisory Committee. The general public has the opportunity to engage in the process via observation of the Advisory Committee's meetings, suggesting research to be included in the Committee's research reviews, and submitting public comment (Office of Disease Prevention and Health Promotion, 2015). Active public engagement in this process by those who have healthcare expertise and are advocates for improved health, such as nurses, are necessary to ensure that the revision of the Guidelines does not take place in a political void. Guided by Critical Theory, nurses can actively engage in this process every five years, in order to ensure that guidelines are based on the needs of the population, and not special interest groups.

How Might This Information Affect Nursing Practice?

Many aspects of society contribute to childhood obesity, such as sedentary lifestyles (Andersen, Crespo, Bartlett, Cheskin, & Pratt, 1998), unhealthy school lunches (Eagle et al., 2010), lack of access to playgrounds (Potwarka et al., 2008), advertising of unhealthy foods (Harris et al., 2013), and large portion sizes (Pourshahidi et al., 2014). Because of the seriousness and complexity of childhood obesity, nurses must help ensure that obesity

initiatives are implemented to their fullest potential. Menu labeling is a step in the right direction; more nutrition information for consumers can help them make healthier choices. Yet, our analysis reveals that menu labeling could be more effective if barriers such as insufficient nutritional knowledge, inability to apply caloric information, and lack of concern or awareness about childhood obesity are accounted for in the development, implementation, and evaluation of such obesity policies. Nurses across clinical, academic, and public health settings are naturally capable of applying a critical approach to address childhood obesity because of their discipline's central concern for person, environment, and health (Fawcett, 1984). As nurses are poised to address this important health disparity, it is imperative that they actively promote childhood obesity initiatives that are vetted through a critical theory analysis.

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Figure 1.

A comparison of a positivistic versus a Critical Theory approach to childhood obesity. Individual, family, community, and societal factors are known to contribute to childhood obesity (Davison and Birch, 2001). A positivistic approach only considers a child's individual characteristics that contribute to weight status (center circle partially shaded), ignoring other factors that may place a child at increased risk of becoming overweight, and thus only explains a partial picture of the problem. A Critical Theory approach considers individual, family, community, and societal factors that contribute to a child's weight status (center circle fully shaded), providing a more comprehensive view of the problem.