

The Children's Hospital of Philadelphia

Homeless Health Initiative

*Operation CHOICES: Nutrition and Fitness
Programming to Combat Obesity and Food
Insecurity for Families in Shelters*

National Health Care for the Homeless Council
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TABLE OF CONTENTS

I.	Introduction	1
II.	Obesity, Food Insecurity and Homelessness	1
III.	The Children's Hospital of Philadelphia Homeless Health Initiative	3
IV.	Summary	7

INTRODUCTION

After the loss of a family member, Ashley Smith, a 23-year-old mother, and her two children, three-year-old Summer and two-year-old James, moved into a women and children's shelter in West Philadelphia.¹ One of Ashley's concerns when the family moved into the shelter was that she couldn't cook meals for her children anymore. Ashley described the meals in the shelter as lacking variety; the Smith family ate many of the same meals week after week, some of which they did not enjoy. Multiple cooks at the shelter made it difficult for the family to adjust to different cooking and preparation styles. Some meals tasted bland, while others were full of seasoning. Although Ashley always tried to show her children that home-cooked meals were better than fast food, without the ability to cook her own meals she sometimes found herself buying prepared food (when she could afford it) to escape the monotony of shelter meals. Unfortunately, the local community, with its predominance of corner stores and fast food, did not offer many fresh, healthy options.

Since shelters provide families with three meals a day, it might be easy to assume that families eat nutritious, well-balanced meals and do not experience issues of food insecurity or obesity when they are staying in shelter. However, many families living in shelters struggle with obesity and food insecurity on a daily basis. During focus groups conducted with families living in shelter, The Children's Hospital of Philadelphia (CHOP) Homeless Health Initiative (HHI), a health outreach program for women and children living in West Philadelphia shelters, learned that many families are dissatisfied with shelter meals and struggle with issues of weight and obesity. HHI also learned that, like the Smiths, families staying in West Philadelphia shelters have all experienced some type of loss – loss of home and sometimes loss of relationships, safety or health – which can lead to feelings of disempowerment, especially in a shelter environment characterized by authority and strict rules.

Mothers living in shelter experience profound loss of control over food. Like Ashley, many mothers wish they were able to prepare meals for their children and feel forced to buy food in the neighborhood because of their lack of choices in shelter. Families' food choices and access are affected by the restrictive policies in the shelter environment, as well as by the lack of access to kitchens, proper food storage, and community grocery stores. Consequently, hunger, weight and health status are impacted.¹

This case report will describe the problems of obesity and food insecurity as experienced by families living in shelter. It will also present HHI's obesity prevention program, Operation CHOICES, and demonstrate the impact of the program by highlighting the case of Ashley Smith and her family. Operation CHOICES is a voluntary obesity prevention program to help women and children living in shelter learn strategies for making healthy choices. The program does not specifically target families experiencing overweight or obesity for participation. HHI recognizes that many choices are made for families by shelter staff and administration, so the Operation CHOICES program empowers families to find opportunities to make healthier choices while living in shelter. Using trauma-informed principles, the program equips families with knowledge about nutrition and fitness in order to foster increased control of their lives and improve healthy habits that can continue even after moving into permanent housing.

OBESITY, FOOD INSECURITY AND HOMELESSNESS

The national obesity and food insecurity crisis continues to worsen and disproportionately affects those of low socioeconomic status, including women and children experiencing homelessness.² Obesity is defined as body mass index (BMI) at or above the 95th percentile.³ Since 1980, the number of children between the

¹ Names have been changed for confidentiality.

ages of 2 and 19 experiencing obesity has practically tripled, affecting 12.5 million children and adolescents (approximately 17% of individuals in that age group).⁴ In 2009-2010, more than one-third of adults were obese.⁵

The likelihood of being overweight or obese is much greater among individuals experiencing homelessness. Consistent with Centers for Disease Control and Prevention reports, researchers from Johns Hopkins University, the Children's Health Fund, and the University of Akron report higher BMIs among children living in shelter than the national average, with rates of obesity as high as 31%.^{6,7,8} Relatedly, the authors of another study suggest that overweight and obesity are the major forms of malnutrition found in families experiencing homelessness.⁹ In response to such alarming statistics regarding the weight and health status of families living in shelter, the HHI team from CHOP works with women and children living in emergency housing in Philadelphia shelters, who struggle with obesity and food insecurity at alarming rates. In some West Philadelphia shelters, approximately 27% of children aged two and older experience obesity.

The physiological implications of obesity are broad and can be severe. It is well documented that obesity plays a crucial role in the development of insulin resistance syndrome, including hyperinsulinemia, hypertension, hyperlipidemia, type 2 diabetes mellitus, and increased risk of atherosclerotic cardiovascular disease.¹⁰ Twenty-five percent of people who are obese are already glucose intolerant and at high risk for developing diabetes.¹¹ New research suggests obesity may be linked to cancer¹² and possibly autism.¹³ The emotional toll of obesity is also devastating: many children struggling with obesity also struggle with depression, low self-esteem, bullying, and social isolation.^{14,15} Children who are obese are more likely to struggle with obesity into adulthood, and adult obesity tends to be more severe. Adults who struggle with obesity often encounter prejudice and discrimination at work, school, and in social settings. They may feel rejected, shameful or depressed.¹⁶

As with obesity, food insecurity disproportionately affects women and children who live in poverty. Food insecurity, defined as limited or uncertain access to adequate food,¹⁷ impacts 14.6% of all US households and 40.2% of households living under the poverty line.¹⁸ Children experiencing homelessness struggle with hunger at twice the rate as children with homes.¹⁹ Instability of housing and food access can furthermore affect a young person's eating habits and foster an unhealthy relationship with food. For example, youth between the ages of 9 and 18 living in homeless shelters in Minnesota reported overeating as a coping mechanism for food insecurity, likely a manifestation of the *hunger-obesity paradigm* experienced by people living in poverty.²⁰

Few studies have been conducted to examine the effects of obesity among people experiencing homelessness. There is a great need to understand the complexity of the problem for adults and children who are experiencing homelessness, given that obesity and associated problems likely affect 30% of the more than 1.59 million Americans experiencing homelessness,²¹ incurring healthcare costs estimated at hundreds of millions of dollars.²² Given the elevated rates of obesity and food insecurity among people experiencing homelessness, it is of utmost importance to assess ways in which culturally sensitive, effective interventions can address prevention, education and treatment of obesity within this population. It will be critical to effectively adapt prevention and treatment guidelines for this often overlooked population. Prevention efforts focusing on children are especially needed because once children have become overweight it is difficult to reverse the problem, which often results in struggles with obesity in adulthood.²³ In order to be effective, a program should address the complex societal, environmental, and structural realities of the population being served. CHOP HHI developed such an obesity prevention program, Operation CHOICES, to address the problems of overweight, obesity and food insecurity experienced by families living in West Philadelphia shelters.

THE CHILDREN'S HOSPITAL OF PHILADELPHIA HOMELESS HEALTH INITIATIVE

CHOP HHI is a free volunteer health outreach and prevention program that offers a coordinated, multi-disciplinary approach toward the goal of helping children in shelter achieve optimal health and life potential, thereby breaking the cycles of homelessness and poor health. HHI works toward this goal by striving for the following objectives:

1. To provide high quality, culturally-competent acute care services to children in shelter
2. To encourage the use of primary and specialty care, and improve access to insurance coverage
3. To enhance healthcare providers' knowledge of and exposure to homelessness and its impact on children's lives and their health
4. To provide education to shelter staff, shelter residents, and community groups
5. To collaborate with local and national partners to effectively advocate for children in shelters and assist in program replication

In Philadelphia, almost all family shelters serve women and children only. Accordingly, HHI provides most of its services, including Operation CHOICES, in shelters that serve only women and children.

Operation CHOICES

Over the last three years, CHOP HHI explored the dynamics of obesity and food insecurity in women and children living in emergency housing in Philadelphia's urban shelters. This was accomplished with input from stakeholders, including families and staff in shelter. As a result, HHI developed and implemented an obesity prevention program, Operation CHOICES, that provides fun and interactive educational sessions related to nutrition and physical activity to families in three West Philadelphia shelters. The Operation CHOICES program, based on an ecological model, has affected change on the individual, shelter, and systems levels.

The Operation CHOICES leadership team, consisting of two pediatricians and two social workers, collaborated with health care professionals including pediatric residents, nurses, nutritionists, dietitians and physical therapists to develop nutrition and fitness curricula for families living in shelter. The Operation CHOICES program uses a small budget and minimal equipment so that families with little financial resources can learn how to make healthy nutrition and fitness choices on a limited budget. The program was piloted in one shelter and then expanded into two additional shelters.

HHI recruited and trained over 100 volunteers from CHOP and local universities to facilitate the Operation CHOICES program weekly at each shelter. Since volunteers vary in their professional and personal backgrounds (ranging from university athletes to pediatricians to information technology specialists) and have different levels of experience around nutrition and fitness, HHI trains each volunteer before they participate. Volunteers are trained on how to use the curricula, and they are also oriented to homelessness and shelter culture. Perhaps most importantly, volunteers are educated about the impact of trauma on families living in shelter and are trained to implement trauma-informed care. Many of HHI's volunteers are consistently present and have been participating for a year or more. HHI encourages volunteers to attend consistently so they can build trusting relationships with the families. At each of the three shelters using Operation CHOICES, a volunteer leader coordinates the schedules and roles of all the volunteers, who work as a team and take turns leading different parts of the lesson. HHI's volunteers also

serve as positive role models for the families living in shelter. For example, as a group of volunteers and children were walking back to the shelter from the park after a session, one college student volunteer talked with a young girl about his homework assignment – creating a business plan. The volunteer explained his assignment in an understandable way, and the young girl was surprised to learn that *adults* have homework, also.

Currently, HHI volunteers conduct a total of six sessions every week, at three different shelters: two sessions per week are offered at each of the three shelters. Programming is delivered to mothers and children separately because HHI learned from mothers that they value, and desperately need, some time to take care of themselves. Mothers and children are taught similar concepts to reinforce healthy living as a family. Also based on family feedback, HHI combines nutrition and fitness education so families learn about both concepts simultaneously while participating in various physical activities. Lessons are constantly evolving based on the expertise of nurses, dietitians, nutritionists, physical therapists, and pediatricians, as well as feedback from families. Lessons include the following topics:

- Basic Food Groups
- My Plate – portion & serving sizes
- The importance of hydration
- Go, Slow, Whoa! Foods – eating certain types of food in moderation
- Heart health
- Healthy habits – including healthy nutrition, fitness, hygiene, and oral health
- Nutrition label reading
- Health consequences of obesity
- Grocery shopping
- Strengthening
- Endurance
- Flexibility
- The importance of physical activity
- Balance, coordination and agility

Role of Trauma

Families experiencing homelessness also experience high rates of trauma, which is a unique aspect of the obesity crisis among families experiencing homelessness. Therefore, trauma must be considered in how prevention and treatment programming is delivered. Often, the stress of experiencing homelessness is worsened by previous traumatic experiences such as abuse, loss, illness, and/or violence. Approximately 92% of mothers experiencing homelessness reported surviving severe physical or sexual abuse during their lifetime, while 86% of children experiencing homelessness reported exposure to trauma.²⁴ For mothers who have lost their home and sometimes lost relationships with family or friends, living in shelter also means that they have lost their ability to cook for their families. Moms can no longer provide that nourishment for their children, which can compound the guilt they already feel by bringing their children into shelter.

HHI recognizes the devastating impact of trauma, particularly the sense of loss and disempowerment that families experience in shelter, and incorporates trauma-informed principles in all programming and volunteer training. HHI also helps shelter staff and city officials understand that sometimes the complaints around food, which they did not think were justified, come from feelings of disempowerment, loss, and trauma. HHI encourages staff and supporting agencies to address this issue by involving families more in the food process and offering choices whenever possible. Now, families in shelters that use

Operation CHOICES have more of a voice around food, and menus reflect the variety and creativity shared by families and staff. Subsequently, food complaints have decreased in these shelters.

Operation CHOICES – Individual Level

When HHI conducted focus groups with families living in shelter, HHI learned that:

- Families were dissatisfied with meals, lack of choices, lack of options for young children, and lack of fresh food options.
- Families wanted HHI to work with kitchen staff to improve the meals served.
- Families wanted to learn more about nutrition and how to incorporate these lessons into their lives.
- Families wanted more opportunities for physical activity.

Although much of the feedback from families was actually directed at the shelter level, HHI and Operation CHOICES volunteers provide families with the knowledge and skills to make healthier choices to improve their health, both immediately as well as in the future. Mothers have reported that their children read food labels at the corner store to find a healthy snack and modify the food they are served in shelter to make it healthier (e.g., remove the skin from meat before eating, ask for more vegetables). HHI has received overwhelmingly positive feedback from families who participate in the program. The Smith family, for example, has moved into permanent housing but continues to implement the healthy habits they learned from participating in Operation CHOICES:

Shortly after moving into shelter, Ashley began to participate in Operation CHOICES programming weekly for approximately nine months. Her children also participated in Operation CHOICES programming for approximately four months. Ashley was an active participant in the Operation CHOICES programming and whenever possible she applied the lessons she learned. She read nutrition labels in order to choose healthier options. Although she did not have her own kitchen to prepare the recipes she learned, like the one for chicken curry salad wraps, she shared the recipes with friends and even successfully introduced her fiancé to low-fat mayonnaise.

Ashley reported that while living in shelter, the weekly exercise program helped her feel less “grumpy” and more positive. She also described having more energy to accomplish things she needed to do for herself and her family. The program also provided her children with an outlet for their abundant energy. Ashley found other opportunities to increase her family’s physical activity, such as walking her daughter to school and taking time to go to a nearby park or playground. Now that Ashley lives in permanent housing, she involves her children in preparing meals and continues to reinforce the importance of eating healthy meals at home. Ashley and her children continue to walk to and from daycare and school. They also frequently utilize the playground that is located in their apartment complex, since it is one of few safe places to play in their neighborhood. She continues to use recipes provided by Operation CHOICES and incorporates healthier ingredients into her cooking.

Operation CHOICES – Shelter Level

In order to sustain changes on an individual level, HHI worked closely with shelter staff to support a culture of healthy choices. During focus groups with staff, HHI learned that, similar to families, kitchen staff felt disempowered about the food being served. They felt constrained by strict menu guidelines imposed on them by the federally funded food program. Staff did not know how to incorporate variety or creativity while following the rigid guidelines. They also felt discouraged by the complaints they heard from families and by their very limited budget. Many staff believed that families complained because they were not accustomed to eating the food served in shelter. Staff recognized that the food being served was not always sensitive to the cultures and traditions of the families being served, but they also believed that the

meals were healthier than what the families usually ate. However, families insisted that they had access to fresher, more nutritious meals before they moved into shelter.

HHI shifted the dialogue about food satisfaction from one that focused on perceived personal deficits of families and shelter staff to a dialogue that highlighted the impact of trauma on families. Leaders from HHI helped staff understand the feelings of loss, especially around food and control, associated with moving into shelter. HHI suggested to staff that maybe families were dissatisfied with the structure, service, and limited options of meals more than they were with the quality of food. This new dialogue transferred the negative experiences around food from a personal realm (families being blamed for not liking food deemed healthy by shelter staff and shelter staff being blamed for preparing subpar food) to an external issue (trauma) for which neither families nor staff was to blame.

HHI also helped improve communication between shelter staff and the agencies responsible for implementing the food program in order to clarify the program rules and develop new, free, or low-cost ideas to improve the meal experience for families living in shelter. This was a challenging process, the difficulties of which are further detailed in the system level discussion below. Although HHI had buy-in from shelter staff, they were restrained by guidelines implemented by higher authority, which made it difficult for HHI to affect any sustainable change on the shelter level without affecting change on the system level. Similar to improving the dynamic between families and shelter staff, HHI appreciated the importance of helping shelter staff recognize opportunities where they had some control to make healthier changes while simultaneously working with systems-level agencies to expand the decision-making purview of the staff.

In the shelters that use Operation CHOICES, the shelter kitchen coordinator now offers a weekly “tasting” during which families are invited to taste a new healthy recipe and vote on whether it should be included in future meals. Mothers are invited to be “chef for a day” and assist kitchen staff as they prepare meals. One shelter even invites families to share their recipes and help prepare their favorite foods for all of the families to enjoy. Jazz music is played in the dining room of one shelter to create a more relaxed and enjoyable atmosphere during mealtime. Even the staff is now offering healthier snack options (e.g., fresh fruit, vegetables, and water) at staff meetings. HHI has truly manifested a shift in the shelters’ food culture.

Operation CHOICES – System Level

After learning of the meal dissatisfaction of families and staff, HHI tirelessly investigated the processes of providing food and planning menus in shelter. HHI spearheaded efforts to bring together organizations responsible for menu development, food procurement, food delivery, and food service in order to overcome obstacles and improve the healthy and child-friendly options for families in shelter. HHI experienced initial defensiveness and discouragement from city and agency staff who tried to work effectively within strict federal policies and tight budgets. HHI patiently worked with agencies to ensure them that HHI wanted to offer support and partner with them to improve the food options in shelter. Despite their best efforts, city and agency staff could not seem to consistently satisfy families within the food program guidelines and budget. They also struggled with ways to effectively train kitchen staff. Like shelter staff, city and agency staff seemed to take food complaints personally – an affront to their hard work of balancing budgets and food access and menu guidelines. HHI found it critical to highlight the mutual benefits for families, shelter staff, and city and community agencies. Ultimately, HHI facilitated a more effective collaboration between city and community agencies and shelter staff to provide healthy choices to families and maximize financial reimbursement for meal participation. HHI helped city and community agencies to understand family and staff perspectives, to move beyond traditional thinking to empower staff creativity and family involvement, and subsequently to increase meal satisfaction rates. City and community agencies continue to collaborate with HHI and shelter staff to develop new and exciting ways to offer healthy *choices* to families in shelter.

An additional systemic obstacle was that shelters located in West Philadelphia neighborhoods have only limited access to fresh produce and safe outdoor spaces for physical activity. In response to these conditions, HHI connected shelters with community agencies to support gardening efforts, offer grocery store gift cards, and donate healthy food items and yoga equipment. HHI is currently seeking to collaborate with food advocacy agencies to improve quality food access in the neighborhoods surrounding the shelters. HHI also collaborates with community partners who can offer safe outdoor spaces for families to play and increase their physical activity.

SUMMARY

Empowering Families, Shelters and Systems to Battle Obesity and Food Insecurity

After living in shelter for 10 months, the Smith family moved into permanent housing. Although Ashley misses participating in Operation CHOICES programming, she is happy to apply the lessons she learned in her own home. The Smith family exercises every day, including walking to school, playing outside and going to the park. Ashley describes her children as more physically active now. Through the Operation CHOICES program, Ashley and her children were introduced to a variety of healthy foods. They continue to try different nutritious foods. According to Ashley, the children are excited about cooking together – “they love to stir and season!” The Smith family continues to use low-fat mayonnaise and eat appropriate portion sizes. Ashley states that prior to participating in Operation CHOICES, she and her fiancé ate large portions. After participating in Operation CHOICES, she learned how to eat adequate portions and has helped her fiancé eat appropriate portions, as well. Now that she lives in her own home, Ashley eats small healthy snacks throughout the day and has increased the amount of fresh vegetables she serves to her children. Ashley is currently pregnant and working hard to ensure she continues eating nutritiously and getting regular physical activity to keep herself and her growing family healthy.

Ashley is a motivated young woman who constantly strives to improve herself, and while in shelter she participated in a variety of voluntary programming, such as parenting and computer classes, in addition to Operation CHOICES,. Now that she lives in permanent housing, she continues to seek opportunities for growth. She found a job-training program for expectant moms that will provide her with a job after her baby is born. Ashley wants the best for her children and has always tried to eat healthily and provide nutritious food for her children, but she has limited money and access to healthy food. Even though she is in permanent housing, she still lives in the same neighborhood that lacks affordable, nutritious food. But now Ashley is equipped with more knowledge of ways to overcome these obstacles and teaches her children so that they, too, will have better skills through childhood and into adulthood.

HHI has developed programs uniquely tailored to the shelter environment - reaching over 700 mothers and children through nutrition and fitness opportunities, improving shelter cultures to serve healthier food options in a culturally sensitive and respectful way, and helping to shape the city's food distribution to maximize fresher produce and healthier menu selections. Operation CHOICES highlights the importance of tailoring programming to meet the unique needs of families experiencing homelessness.

As HHI learned, prevention programming is most effective when it targets various levels of change. HHI also learned from families, like the Smiths, that issues of obesity and food insecurity are complicated by experiences of homelessness and trauma. Families living in shelter are particularly vulnerable to the impact of policies developed and implemented by shelter staff, city officials, as well as the surrounding community. It is necessary for obesity prevention programs to successfully forge relationships with city officials and community agencies to find ways to improve the overall outlook for families experiencing

homelessness. These partnerships are critical to the success of the program and can improve fresh food and physical fitness options for families and staff, overcome perceived obstacles, and offer education and advocacy opportunities. In order to build such successful relationships, it is necessary for obesity prevention program leadership to help stakeholders at each level – individual, shelter, and community – understand the mutual benefits of improving nutrition and fitness for families.

As seen with the Smith family, families living in shelter can be educated and empowered to recognize opportunities to make healthier choices, immediately. Families can also transfer lessons learned, while in shelter, to transitional or permanent housing. Whether families live in shelter, transitional housing or permanent housing, the surrounding communities will impact their food choices and opportunities for fitness. Accordingly, it is necessary to address the food and physical activity environment in the surrounding community.

While the obesity epidemic receives increasing national attention, the unique impact of obesity on families experiencing homelessness is often overlooked because the connection is not readily apparent. It is imperative that individuals and agencies working with such families strive to bring attention to and solutions for this often-invisible population. HHI's Operation CHOICES is one example of an effective community program addressing obesity prevention and health issues, which can be implemented to help other populations of adults and children living in shelters.

The authors welcome contact from interested parties. Correspondence regarding this case report should be addressed to Melissa Berrios at Berriosm@email.chop.edu.

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