Voices through cameras: Learning about the experiences and challenges of minority government-insured overweight and obese New York City adolescents using photovoice

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Abstract

Background: Over one-third of US adolescents are overweight, and about 18% are obese. Prevalence is similar in New York City adolescents, with disparities across socioeconomic status and race/ethnicity. Photovoice is a participatory approach that allows participants to communicate experiences through photographs and interviews. The purpose of this pilot study was to increase adolescent awareness of positive and negative influences on dietary and physical activity (PA) behaviors, and increase understanding of the perceived role of the physician in influencing these behaviors.

Methods: Seven adolescents aged 13–19 years diagnosed with overweight or obesity were recruited from a government insurance-based pediatric clinic at New York Presbyterian Hospital/Weill Cornell Medical Center. Participants completed photovoice assignments and individual interviews addressing perceived barriers, strategies, and influences related to healthy dietary and PA behaviors. Interviews were transcribed and reviewed to identify key themes across participants.

Results: Barriers to healthy eating included family and cost; strategies included controlling portion sizes and eating in moderation. Barriers to PA included academic pressures/homework and the neighborhood environment; strategies included making PA fun and social support. Participants identified the major role of the physician and physical education teachers in influencing health behaviors, and the desire for increased or different communication with the physician to facilitate healthy eating and PA. Participant awareness of health behaviors was increased as a result of study participation.

Conclusions: Photovoice is a unique method to engage adolescents around personal dietary and PA influences and behaviors. Increased awareness of personal health behaviors may help promote positive behavioral change.

Keywords: Adolescents, Diet, Minority groups, New York City, Obesity, Overweight, Photography, Physical activity

Background

In the USA, 31.8% of children aged 2–19 years are overweight and 16.9% are obese.[1] Prevalence is even higher among adolescents aged 12–19 years, with 33.6% overweight and 18.4% obese.[1] Disparities in obesity prevalence are seen by race, with over 40% of Hispanic and Black adolescents overweight and nearly 24% obese compared to 30% of non-Hispanic White adolescents overweight and 16.1% obese.[1] Self-reported prevalence of overweight and obesity among New York City (NYC) adolescents is not as high as the national prevalence, but disparities are still observed, with overweight and obesity prevalence disproportionately higher in at-risk neighborhoods such as East and Central Harlem, North and Central Brooklyn, and the South Bronx. In these areas, obesity prevalence

ranges from 12.9 to 15.8% compared to an average of 11% in all other neighborhoods.[2] The prevalence of overweight and obesity based on measurements taken in NYC Public Schools indicates that these self-reported figures may underestimate the problem, particularly among middle school-aged students. The prevalence of obesity in this group was 20.6%, while high school-aged students had a prevalence of obesity of 13.7%.[3]

The high prevalence of adolescent overweight and obesity is multifactorial in origin, including poor dietary behaviors and lack of physical activity (PA), which are in turn influenced by individual characteristics (attitudes, beliefs, knowledge, self-efficacy), the social environment (family, friends, peer networks, parental education level, ethnicity, culture), the physical environment (accessibility and availability of foods, portion sizes, neighborhood safety, crime rates), and societal influences (mass media and advertising, cultural norms, local, state, and federal policies).[4–7] This complex problem has far-reaching consequences such as increased risk of asthma, hypertension, dyslipidemia, hyperglycemia, poor dental health, attention deficit hyperactivity disorder, anxiety, and poor sleep during childhood; and premature mortality and increased risk of diabetes, hypertension, heart disease, and stroke in adulthood.[8–11]

In addition to having the highest prevalence of overweight and obesity, minority adolescents also have the highest prevalence of attrition from pediatric weight management programs,[12,13] with parents citing reasons such as the child's desire to leave the program and the program not being what the family was looking for.[14,15] Unfortunately, little is known about minority overweight and obese adolescents' perspectives on nutrition, PA, and weight management programs, or their perception of the physician–patient relationship.[16,17]

It is clear that innovative approaches are needed to address the factors contributing to pediatric obesity and engage overweight and obese adolescents in their own health. The American Academy of Pediatrics recommends multidisciplinary interventions, while the World Health Organization suggests inter-sectoral approaches to strengthen the capacity of the primary healthcare system.[18,19] Photovoice is a unique community-based participatory research method that involves placing cameras in the hands of research participants so they may record and reflect on strengths and concerns within their community using photographic images and in-depth interviews.[20,21] Photovoice has been shown to be a promising strategy for engaging people, and has been used to engage obese adolescents in particular.[22,23] Given the limited literature on obese adolescents' health perspectives, the purpose of this pilot study was to use photovoice to better understand their perceptions about barriers, strategies, and influences related to healthy dietary and PA behaviors, and to determine the feasibility of using photovoice to engage government-insured overweight and obese adolescents in their own health.

Methods

Recruitment

Investigators approached adolescents aged 12–19 years old with a diagnosis of overweight or obesity in the electronic medical record presenting for routine or urgent care appointments in a government insurance-based pediatric clinic at New York Presbyterian Hospital/Weill Cornell Medical College (NYPH/WCMC). Adolescents with a diagnosis of developmental delay or any condition that prohibited the independent use of a camera were not recruited. Interested adolescents were given detailed information about the study by a research team member either before or after their doctor's appointment, and assured that the decision to participate would not affect their healthcare. Investigators were not part of the healthcare team. Written consent or assent was obtained from participants; parental permission was also obtained for minors. Contact information was collected from participants and parents of minors and an individual orientation session was scheduled.

As an incentive to participate, subway fare was provided to the participant and an accompanying parent at each session, and participants were given a $60 store gift card and a certificate for 15 hours of community service upon completion of the study. The study protocol was approved by the Institutional Review Boards at both WCMC and the City University of New York (CUNY) School of Public Health.

Photovoice sessions

Participants attended three individual sessions led by an investigator and a research assistant (RA). The first was an orientation session during which the participant completed a demographic survey and received a lesson on photography and safety. This was followed by a guided discussion with the investigators about the participant's experiences, attitudes, and beliefs about barriers, strategies, and influences related to healthy dietary behaviors, including the role of the physician. The RA took notes during the discussion which were given to the participant at the end of the session to help

prompt photo ideas. The participant was then asked to complete a 'photo activity' that consisted of taking at least five photos of 'things that make it hard or easy for me to eat healthy'. Based on the investigators' prior experience, and discussion among research team members, it was agreed that a minimum of five photos would provide adequate data without overburdening participants.

At the second session, the participant brought in his/her photos, which served as the basis of further discussion about barriers, strategies, and influences for healthy dietary behaviors. Once the photos had been discussed, the participant was guided in a discussion about his/her experiences, attitudes, and beliefs about barriers, strategies, and influences related to PA behaviors, again including the role of the physician. Notes from this discussion were again given to the participant to help trigger photo ideas. The second photo activity consisted of taking at least five photos of 'things that make it hard or easy for me to be physically active'.

The third session involved a discussion of the photos from the PA photo activity, as well as soliciting feedback about the feasibility and acceptability of the project. A semi-structured interview guide was used for each discussion at all sessions to ensure standardization of the interview questions across participants (see the Appendix).

All data were collected from January to June 2014, with the majority collected in February and March. Sessions were held at one of two sites: the clinic at NYPH/WCMC from which the participants were recruited, or the CUNY School of Public Health, which the researchers thought may be a convenient alternative location for the participants. Most participants elected to use their personal or family smartphone to complete the photo activities, but digital cameras were provided to participants who did not have access to a smartphone. Participants emailed or texted their photos to a secure study email account or downloaded the photos from a digital camera at each session.

Data analysis

All interviews were recorded using a digital voice recorder and transcribed verbatim. Transcripts were reviewed to check for accuracy, and inductive and deductive processes were used to identify codes (ideas emerging from the text), themes (groups of similar codes), and categories (general domains of information covered). A preliminary codebook was developed, guided by evidence-based dietary and PA strategies related to pediatric obesity treatment and prevention. The codebook was reviewed by three investigators to ensure standardized definitions of the codes. Transcripts were independently reviewed by two investigators using reflexive iteration to identify additional codes and discrete units of text (phrases, sentences, paragraphs) that corresponded to specific codes.[24] The two investigators compared their coding and resolved any discrepancies through discussion and consensus. The coding reports were then summarized by key themes, while identifying related text evidence. Data analysis was conducted using code trees and thematic conceptual matrix sheets with Excel spreadsheets.[25]

Results

Participants

Seven (six female and one male) adolescents completed this pilot study. The participants were 13–19 years old (mean age 15.6 years old); African-American (two), Hispanic (two), African-American and Hispanic (two), and Asian (one); and came from the Bronx (three), Harlem (two), Central Brooklyn (one), and Queens (one). All participants were recipients of government insurance, which provides free or low-cost health coverage for children up to the age of 19 years from low-income families.

Themes

Several common themes emerged from the data about barriers, strategies, and influences related to healthy dietary and PA behaviors. Unintended positive consequences of study participation also emerged from the feasibility and acceptability interviews. Data saturation was obtained after five participants.

Barriers

Adolescents commonly mentioned the negative influence of the family as a major barrier to healthy dietary behaviors. Participants expressed not yet being able to do their own grocery shopping and how they 'still have to eat what [my mom] buys'. They also highlighted how not everyone in the family may be agreeable to healthy dietary changes. One 19-year-old participant said, 'When you're in a household, you wanna have this healthy lifestyle, but everybody else … might not be thinkin' like you at that point … So things like that just make it hard'. She later shared a photo of a box of candy (see Fig. 1) and said, 'It's my stepfather … he's the one who brings the junk in the house … he's not really just into the whole healthy thing … [he] likes the candy and the donuts and the chips and things like that'.

In addition, participants frequently highlighted the perceived high cost of healthy food and low cost of unhealthy food as a barrier to healthy eating. In

Figure 1 Box of candy.

particular, participants were concerned about 'wasting' money on food that might not taste good. For example, a 16-year-old participant said 'French fries and … a double cheeseburger … all of that is only $2, so it's … cheap, why don't I get it? … The salad's like $5. But the thing is … should I spend my money on something that I really don't want or something I'm certain that's really [tasty]?'.

In terms of PA, participants universally perceived that lack of time was the biggest barrier. Most talked about how homework interferes with their ability to be physically active. One 14-year-old participant took a picture of his homework and said, 'This is a whole bunch of math problems … this doesn't really help me be physically active because this stresses me out a lot … whenever I'm stressed out I don't have any time for physical activity'.

Another common barrier to PA was the neighborhood environment, with many participants perceiving their neighborhoods to be unsafe. A 16-year-old

Figure 2 Park.

participant said 'It's not the way … it used to be when I was little … everybody used to go to skating … you could lose weight doin' skatin' … it was fun … But they messed it up … they shot it up … so everybody stopped goin' … because [of] the violence. People wanna survive … people don't wanna risk their life to doin' [fun] things'. Parks also proved to be barriers at times due to other patrons and dangerous activity that may occur there. One 14-year-old participant said, 'Having the park next to my house makes it really easy 'cause it's right there and I could just walk to it … But a lot of older kids from the bad neighborhoods like to come to the park and start fights there … So some days I can't go 'cause someone's beating each other up'. A 19-year-old participant shared pictures of a nearby park (see Fig. 2) and said, ' … there's been a few incidents here. Like a few shootings … there was like one or two I heard about. And … one of my friends, her boyfriend, he got shot actually. … a lot of people come here … and then they can just get crazy'.

Strategies

A few participants had developed strategies to make healthy dietary choices. These included eating in moderation and controlling portion sizes. One 18-year-old participant observed, '[The cupcakes are] humongous … and I was like 'Oh my god how could people eat this?!' I would definitely cut that … And … have one piece and be like 'Okay, whoever wants the rest, you can take it'. One of the 14-year-old participants found a different technique to control portion sizes: 'I was like 'okay I am determined to take a smaller portion size' so I had a big plate and then I took small portion sizes but I feel like that wasn't enough for me … So from recently I tried using small plates. That actually worked. It actually felt like I'm eating enough'.

All the adolescents identified making PA fun and having social support as strategies to increase their activity levels. One 15-year-old participant said, '[Volleyball] is one of the things that make it easy to be physically active because … volleyball's my favorite sport and I've been playing for three years now, so I feel like it's easy for me to … be active because it's something that I love doing'. The importance of social support was also highlighted by a photo (see Fig. 3) and comment from another 14-year-old participant who said, '[This is] an empty street, and these are all the homes of my friends, and as you can see, they're not outside. This makes it harder for me to be physically active because without friends … it wouldn't be much fun, playing by yourself … No fun in playing soccer by yourself … I prefer playing sports with your friends'.

Influences

In discussions about role models for healthy dietary and PA behaviors, participants highlighted the significant role of the physician in influencing knowledge, attitudes, and beliefs. One 13-year-old participant's comment highlighted the impact of the physician's recommendation: 'I'm eating better now. Like, I eat breakfast now … and lunch and … yeah, I think I'm … a healthy person now'. A 14-year-old participant also described the impact of the physician's recommendation when she said, 'Like 2 years ago my doctor started to say well maybe it would be more helpful for us to have some stuff to exercise at our house 'cause we're kinda far away from the gym … and that's when my mom got the treadmill'.

Participants expressed that one of the reasons for the impact of the physician's recommendations was the personal connection they had with their physician. For example, a 16-year-old participant said, 'My old doctor – I was really close with her. She used to tell me like little things and I started losing weight … '. She went on to say, 'It's like we workin' together … she's just tryin' to help me get together, by like makin' so there's similarities sometimes between each other … '.

Participants also highlighted the importance of physicians tailoring the counseling to their needs and interests in order to have an impact. One 18-year-old participant said, 'I explained my situation first, and then [my doctor] understood and … gave me baby steps. 'Oh try this first, and then try this, and then the next week try this.' And from there, [I] just got used to it.' A 16-year-old said, '[My doctor] put things like, 'What do you like? What do you eat? How do you go about your day?' … She tried to work with me … like a little personal thing'.

Participants provided insight into ways in which they felt physician–patient communication related to diet and PA could be improved. A 13-year-old expressed her desire to establish a better personal connection with her physician by saying, '[My doctor] barely asks me any questions. She just listens to what my mom says'. One 16-year-old participant expressed a similar frustration and said, 'She wasn't really asking enough questions to understand … my problem'. She later said, 'I feel like … they should understand … what surrounds you. Ask … 'what surrounds you?' Just ask that question … then she could understand … [and] work with that'. A 14-year-old participant discussed the importance of the physician understanding dietary preferences specific to his culture: 'I feel like [doctors] could ask. Like they should know about cultural foods … I mean, doctors say to eat

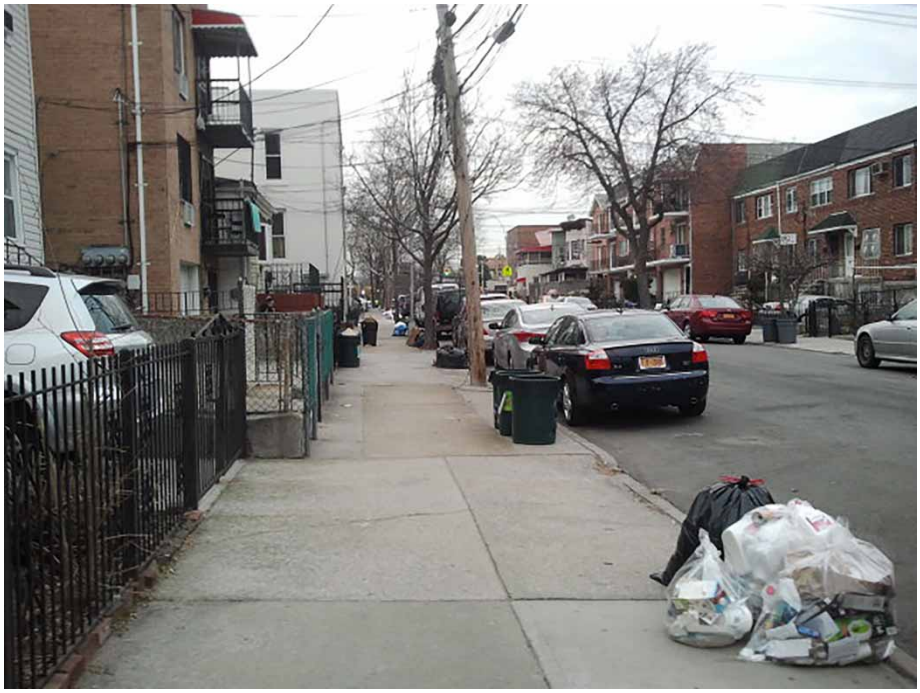

Figure 3 Empty street.

baked chicken, but I don't know how that's gonna happen cuz of the fact that my mom is more used to making cultural food, like traditional food'.

Participants mentioned the importance of the physician providing specific recommendations about diet and PA. A 15-year-old participant said, '[Doctors] be like, 'oh, try to eat healthier.' That's all they say … [I want] specific ways to eat healthier instead of just saying 'eat healthy'. Participants also expressed the desire for recommendations that are specific to their neighborhood environment or daily routine. One 14-year-old said, '[Doctors] tell you to go to the gym and go to the playground but like there's other alternatives to get exercise. You can't always go to the park or always go to the gym … [I want to know] like stuff that you do in your daily life to try to do more of'.

In addition, physical education (PE) teachers were identified as positive role models for the adolescents in terms of PA behaviors. A 16-year-old participant said, ' … now a lotta kids is jogging … because … they see our gym teachers gettin' up doin' it too'. A 13-year-old participant also talked about the impact of her PE teacher when she said, 'My gym teacher says that we need to exercise more … so like he motivates me'. She went on to say, 'it shows that … he cares about our bodies'.

Feasibility, acceptability, and perceived impact of participation

All study participants had a favorable experience participating in the project, and found it to be fun and engaging. They enjoyed taking photos and sharing their experiences with the investigators. Most expressed that the process of taking photos and discussing them at the photovoice sessions resulted in an increased awareness of their own dietary and PA behaviors and influences. One 18-year-old participant reported that the study 'made me do a double-take on things that I would eat or pick up before I even eat them. I'd be like 'Do I really need this?'.

Some participants reported that they changed their behavior as a result of participating in the study. One 14-year-old participant said, ' … now that I'm more aware, I'm trying to do more of the stuff that I'm already doing … and I'm trying to convert my friends to do the same thing … like climb the stairs … not to buy the huge bag of chips … stuff like that'. Another 14-year-old participant talked about how the study made him 'much more aware' of things that make it hard or easy to be physically active and said, 'That's why I joined soccer … last week'.

Discussion

This pilot study was conducted to explore the perceptions of government-insured overweight and obese adolescents about barriers, strategies, and influences related to healthy dietary and PA behaviors. The main barriers to healthy dietary behaviors were family and cost, while the main barriers to PA were time and neighborhood environment. To our knowledge, this is the first photovoice study to focus exclusively on minority government-insured overweight

and obese adolescents. However, the themes identified in our study are similar to those reported by other studies of adolescents, including the low cost of unhealthy food as a barrier to healthy eating, lack of time and concerns about safety as barriers to PA, and the importance of fun and social support for being physically active.[26–28] The similarities between the perceptions of our overweight and obese participants and adolescents of healthy weights suggest that community-level interventions targeting these barriers may be able to serve the dual purpose of both treating and preventing obesity.

All participants discussed the importance of social support and making PA fun. Studies have shown that social support from friends and family is a crucial element in promoting PA in adolescent populations.[29–31] Our study supports these findings, and highlights the importance of evaluating the adolescent's support network and engaging other family members to maximize the likelihood of health behavior changes. Part of this process may involve assessing parental perception of the child's weight, as recent evidence suggests that parents who accurately perceive their child as overweight or obese are more likely to make changes to their child's health behaviors, including PA.[32]

Physician recommendations appear to have an impact on overweight and obese adolescents' health behaviors. We hope that our findings may improve provider self-efficacy and outcome expectations, particularly in light of one study showing that only 12% of pediatricians reported high self-efficacy in obesity management.[33] Our data suggest that the impact of the physician is strengthened when the physician has established a personal connection with the patient and provides specific, tailored recommendations. Our findings also suggest that adolescents desire more of a personal connection with physicians, and that physician–patient communication could be improved through increased physician understanding of adolescent perspectives, needs, and preferences. This is consistent with studies demonstrating that patient-centered, empathetic counseling, such as motivational interviewing, is a promising strategy that may be an effective way to encourage self-reflection and behavior change, and also may lead to higher patient satisfaction with the provider.[34,35] This may be even more critical for overweight and obese adolescents, as satisfaction with the provider–patient relationship was negatively correlated with weight in one study of overweight adolescents.[36]

Many adolescents expressed the desire for specific recommendations from their physician regarding diet and PA, which is consistent with a study showing that the majority of adolescents surveyed identified their physician as the person most likely to know the most about how to eat healthfully.[36] Participants also mentioned the importance of the physician understanding their cultural preferences when making recommendations. Culture influences body image development, child feeding practices, perceptions of the healthfulness of foods, preferences for engaging in PA, and the perception of risk associated with obesity.[6,37] Given the influence of culture on obesity-related beliefs and practices, physicians must take into account the patient's culture when providing diet and PA counseling. Physicians should provide suggestions and alternatives within the adolescent's cultural framework, for example substituting brown rice for white rice or engaging in culturally relevant dance programs like Latin dance or Zumba.[38]

Adolescents also reported that PE teachers play a large role in influencing their knowledge, attitudes, beliefs, and behaviors. This was surprising, as we are not aware of data indicating that PE teachers are such major role models for adolescents. Given this finding, opportunities may exist for interventions that expand on the traditional healthcare model to include other sectors or settings such as the school. Comprehensive, inter-sectoral interventions and reinforcement of health messages from other sources of influence may increase the potential for impact. Such interventions are recommended and supported by organizations like the American Academy of Pediatrics and the World Health Organization.[18,19]

Answers to our feasibility and acceptability questions revealed that participants gained an increased awareness of their health behaviors as a result of study participation. This finding was encouraging given what we know about the importance of the reflective process on changing health behaviors.[22] Engaging adolescents and encouraging reflection through photos and discussion may be an effective means of promoting behavior changes. Indeed, many of our participants reported changing their behaviors as a direct result of participating in the study.

This study had several limitations and challenges. Participant recruitment and retention was difficult, and our sample size was smaller than we anticipated; however, data saturation was obtained after five participants. We feel our sample size was adequate for this pilot and that the number and in-depth nature of the interviews provided rich and detailed data. Our small sample size may limit the generalizability of our findings to broader populations. In addition, most of our data collection

occurred during winter months and seasonality may have had an impact on the barriers and influences identified.

These study findings will be disseminated to physicians and other clinicians who provide clinical counseling to government-insured adolescents. We anticipate this may lead to an increased understanding of the personal experiences and challenges of at-risk adolescent patients. It would be interesting and useful to conduct further research to assess the impact of the study findings on measures such as physician empathy and dietary and PA counseling behaviors. This photovoice method could also potentially be used as part of a weight management intervention that links the clinic and community setting to provide adolescents an opportunity to further reflect on barriers and influences within their environment. Studies similar to ours should be conducted during other times of the year to assess differences across the seasons. Additional photovoice studies may focus on identifying other role models who influence health behaviors, as identifying these individuals may lead to other possible points of intervention that target or involve these role models.

This pilot study provided preliminary insight into minority government-insured overweight and obese adolescent perspectives on the barriers, influences, and strategies that impact dietary and PA behaviors. This study also provided insight into the perceived role that physicians play in shaping adolescent attitudes and beliefs about dietary and PA behaviors. Further studies are needed to confirm our findings and identify additional factors that may impact adolescent dietary and PA behaviors. Participants found the photovoice method to be enjoyable and engaging, and felt that it increased awareness of their own health behaviors.

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Disclaimer statements

Contributors Katherine Van Oss, MD was responsible for study design; obtaining funding; logistical, administrative, and technical support; recruitment of participants; data collection, interpretation, and analysis; drafting, critical revision, and final approval of the article. May May Leung, PhD, RD was responsible for study design; obtaining funding; logistical, administrative, and technical support; data collection, interpretation, and analysis; critical revision and final approval of the article. Julia Sharkey Buckley, MS was responsible for logistical, administrative, and technical support; data collection, interpretation, and analysis; critical revision and final approval of the article. Melanie Wilson-Taylor. MD was responsible for study design; obtaining funding; logistical and technical support; critical revision and final approval of the article. Katherine Van Oss, MD is the guarantor.

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Conflicts of interest None.

Ethics approval The study protocol was approved by the Institutional Review Boards at both Weill Cornell Medical College and the City University of New York School of Public Health.

Appendix 1: Semi-structured interview guide

1. Please tell me why you took this picture.
   (a) What is happening in this picture?
   (b) Does this picture encourage people like you to be healthy or unhealthy? Why?
2. Does your doctor talk to you about food and health/fitness and health/overall health?
   (a) If YES:

(i) What does s/he talk about?
(ii) How often? (e.g., every time you see the doctor, hardly ever)
(iii) Do you like it when your doctor talks to you about food and health/fitness and health/overall health?
(iv) Does your doctor give you good advice about eating healthy/being active/overall health?
(v) Tell me what your doctor talks to you about.
(vi) Is it easy to follow his/her recommendations about food/activity/health?

Prompt: Have you adopted any of the recommendations? Do the recommendations make sense to you?

1. What could your doctor do to make it easier to follow the recommendations?

(b) If NO:

(i) Do you wish your doctor talked to you about food and health/fitness and health/overall health?

3. What would you want your doctor to know about this picture?
4. How much do you feel culture affects your ability to make healthy or unhealthy choices?

   Prompt: How much do you feel what you eat at home with your family affects your ability to make healthy or unhealthy choices?
5. Does your doctor understand the cultural aspects of your food choices?

   Prompt: does your doctor understand what you typically eat at home?
6. What would you like your doctor to talk about when it comes to food and health/fitness and health/overall health?

   Prompts:
   - How much of something to eat, what types of foods to eat/not eat, when and where to eat?
   - How much activity is good, what kind of physical activity you should do?
   - Some things to reduce stress.
7. What concerns do you have for your own health?
   (a) Do you think your doctor is concerned about your health?
8. Do you think you doctor is a good source of information about food and health/fitness and health/overall health?
9. What role do you think you can play in making changes in your own food/activity/weight-related behaviors?

Optional questions

10. Can you describe what a typical day is like for you, from waking up to going to bed? For example, what time does your alarm goes off, what's your morning routine, how you get to school, etc.?
11. Who plays a role in affecting/influencing your food/activity/weight behaviors?
    (a) Friends, siblings, parents, grandparents, school teachers?
    (b) Anyone else? Does your doctor play a role?
    (c) How do these people play a role?
12. What other things play a role in affecting/influencing your food/activity/weight-related behaviors?

    Prompts: availability of certain foods in bodegas, at school; certain foods are less expensive; advertisement; prefer playing computer games; nothing to do outside.

    (a) How do these things play a role?
13. What do you think can be done/changed to improve your food/activity/weight-related behaviors?

    Prompt: access and availability, pricing, more places to play and meet your friends.
14. How can pictures educate other people like clinicians about food/activity/weight and health?

    Prompt: better understanding of your experiences, environment.

Overall question

If you had the chance to take more pictures for this same project, what would you take pictures of?

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