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Barriers to Physical Activity in Urban School Children with Asthma: Parental Perspective

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Abstract

Objective—Physical activity (PA) levels are low in today's youth and may even be lower in those with asthma. Barriers to PA have not been well studied in inner-city, minority children with asthma. We conducted a qualitative study to characterize parental perceptions of barriers to PA and ways to improve PA levels in children with asthma.

Methods—We used the socio-ecological model (SEM) to inform development of our interview guide. Questions fell into two SEM domains: 1) interpersonal (parent, family) barriers and 2) community (neighborhood, school) barriers. Qualitative semi-structured interviews were conducted with 23 parents (21 mothers, 2 fathers) of inner-city children with asthma (ages 8–10 years) from 10 Bronx, New York (NY) elementary schools. Sampling continued until thematic saturation was reached. Interviews were recorded, transcribed, and independently coded for common themes. Emerging themes were discussed and agreed upon by investigators.

Results—Three themes surrounding interpersonal barriers to PA emerged: 1) parental fear of exercise-induced asthma due to lack of child symptom awareness; 2) non-adherence and refusal to take medications; and 3) challenges with asthma management. Four themes around community barriers to PA emerged: 1) lack of trust in school management of asthma; 2) lack of school PA facilities; 3) unsafe neighborhoods, and 4) financial burden of PA.

Conclusions—Our results indicate a complex multi-level set of barriers to PA in children with asthma. Addressing these barriers by involving stakeholders at the family, school and community levels may improve PA levels in children with asthma.

Keywords

Pediatric asthma; exercise; barriers; urban; qualitative study

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Conflicts of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this paper.

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INTRODUCTION

Physical activity (PA) is important for healthy development of children and is a critical component of pediatric asthma management.¹ Exercise in children with asthma is correlated with improved cardiopulmonary fitness and decreased severity of asthma symptoms.^{2,3} Higher PA levels decrease medication use, reduce hospitalizations, lower rates of school absenteeism, and improve quality of life.^{2,3} People with asthma can exercise safely when their asthma is controlled.^{4,5}

Several national authorities have recommended regular PA for patients with asthma.^{1,6,7} However, children with asthma have been found to have significantly lower PA levels compared to their counterparts without asthma.^{8,9} This may be due to the disease-related barriers that preclude their participation in PA. Some of these barriers include the illness beliefs of children perceiving asthma as a barrier to exercise, parental fear about the effects of exercise on asthma, and lack of knowledge and attitudes of school personnel.^{8–12}

The Socio-Ecologic Model (SEM) has been used to describe barriers to PA in healthy children at the intrapersonal (child), interpersonal (parent, family), and community (neighborhood, school) levels.^{13–16} A study of barriers to PA among low-income healthy children in Colorado used the SEM to describe barriers to PA on the family (e.g. parents' work schedules, lack of interest, competing commitments) and community (affordability, neighborhood safety, and access to PA facilities) levels.¹³ A cross-sectional study of Canadian parents also found that low-income households had higher likelihood of reporting barriers to accessing sports and recreational facilities.¹⁴ There is a paucity of literature utilizing this same model to describe barriers to PA in children with asthma. Additionally, many of the previous studies of barriers to PA in children with asthma were done outside of the United States and were not focused specifically on urban, minority children with asthma.^{8,12,17}

This study seeks to characterize parent perceptions of barriers to PA in urban, minority school-aged children with asthma. Parents are important stakeholders in the state of health and well-being of their children. Examining parental understanding of why their children are not getting enough PA can help inform interventions designed to address lack of PA in children with asthma.

METHODS

We conducted a qualitative study using interviews with parents of 8–10 year-old children with asthma attending 3rd and 4th grades in 10 Bronx, New York (NY) elementary schools. The institutional review boards of both the New York City Department of Education and Albert Einstein College of Medicine/Montefiore Medical Center approved this study.

Participants

Each of the 10 schools identified 4–5 students with physician-diagnosed asthma through the school health records. School officials sent letters to homes of students with asthma, who frequently visited the school nurse, informing the parents of the study. Parents interested in

participating contacted the principal investigator (PI) by phone to arrange an in-person meeting. In addition, fliers describing the study were posted throughout the schools. The informed consent process was completed in person immediately prior to the interview.

Eligibility criteria for participation in the study included: (1) the child had physician-diagnosed asthma; (2) the child was 8–10 years old; (3) the child had asthma symptoms in the past 12 months; (4) the child attended one of the 10 public elementary schools included in the study; and (5) the parents spoke English.

Procedure

Interviews—Parents participated in a 30–60 minute in-person interview between December 2010 and June 2011. Most interviews took place at the child’s school, but two were conducted at the parent’s job location and two were held in the family’s home. An interview guide was created and used to elicit parental report on perceived barriers to PA (Table 1). We included themes describing barriers attributed to children under the interpersonal level of SEM as these were based on parental report of their child’s beliefs. Since parents were the participants (not children), we did not include the intrapersonal level of SEM in our analysis and results.

One of the authors (MR), trained in qualitative methods, conducted the interviews. Nondirective open-ended questions were followed by specific probes. For example, the question, “How do you feel about your child participating in sports?” was followed by a more direct question, “Do you worry that your child will have an asthma attack while playing sports?” The interview guide was field-tested with one parent of a child with asthma and the transcript from this interview was used to modify the interview guide. Interviews were conducted until thematic saturation was reached. At the end of the interview, parents completed a questionnaire about their demographic characteristics. Child’s asthma severity and level of control were classified as per NHLBI asthma clinical guidelines.¹ Parents received \$20 for participation in the study.

Data Analysis

All interviews were audio-recorded and transcribed verbatim by trained transcribers. A codebook with operational definitions was created. The authors discussed the discrepancies between the transcripts and created a master codebook, which was used to independently code the interviews for common themes. Qualitative analysis software (NVivo 9, QSR International Pty Ltd, Melbourne, Australia) was used to organize, sort, and code the data. The importance of emerging themes was based on their frequency of occurrence. The themes were discussed and agreed upon by all authors. We used “verbal counting” methodology in which terms like “most”, “majority”, “many”, “some”, and “few” describe a number of participants linked to a theme.¹⁸ In a sample of 23, “most/majority” indicate more than 11, “many” refers to a number between 7 and 11, and “few/several” mean between 2 and 6 parents.

RESULTS

Participant Characteristics

Twenty-three parents of children with asthma (21 mothers and 2 fathers; 2–3 parents from each of the 10 schools) participated in interviews. Mean parental age was 35.3 years, majority of parents were of Hispanic descent (82.6%), and nearly half were unemployed. Mean child age was 9.3 years, half were female. Demographic characteristics are provided in Table 2.

We have identified seven themes representing barriers to PA for children with asthma within interpersonal (parent, family) and community (neighborhood, school) levels of the SEM.

INTERPERSONAL (PARENT, FAMILY) LEVEL BARRIERS—Three themes were identified within the interpersonal level of the SEM: (1) Fear of Exercise-Induced Asthma (EIA) due to children's lack of symptom awareness; (2) Children's refusal to use medications and parental non-adherence to asthma medications; and (3) Parental challenges to managing asthma. Supportive parental quotes are included in Table 3.

1) Fear of Exercise-Induced Asthma (EIA) Due to Children's Lack of Symptom Awareness: The most prevalent barrier to PA mentioned by parents was the belief that exercise causes asthma attacks. Parents wanted their children to be active, but many did not allow them to participate in sports involving a lot of running due to the fear of EIA. Many parents worried about not being present to help their child during an EIA attack and the children not having the asthma medication with them when needed.

Half of the parents reported that their children do not always recognize their asthma symptoms. Many parents worried about their child participating in PA because the child did not always know when they should take a break or use their medications. Many parents mentioned that while having fun during active play, their children choose to ignore their asthma symptoms. Parents who were confident in their child's ability to recognize asthma symptoms were less worried about their child's PA participation.

Many parents believed that their children needed to take breaks during PA and some encouraged their children to rest even if the child did not feel that they needed to. Parents described ways in which they tried to prevent their child's EIA, including drinking water or administering asthma medications. The concept of drinking water to prevent EIA came up in almost half of the interviews.

2) Children's Refusal to Use Medications and Parental Non-adherence to Asthma Medications: The majority of parents reported their non-adherence to the asthma management plan prescribed by the child's physician. Even parents who were familiar with the benefits of using preventive medications hesitated to administer them daily. Reasons given included concerns about the safety and side effects of the medications (e.g., weight gain, hyperactivity, and aggressiveness), as well as possible "addiction" associated with long-term medication use. Some parents believed that the medication is ineffective or that their child does not need it, contradicting the physician's recommendations. Other reasons

for non-adherence included relatives' negative experiences with asthma medications, lack of knowledge about the correct administration, and confusion about the medication's purpose. In addition, several parents reported that their children get frustrated with having to take asthma medications multiple times a day and refuse to use their inhalers. Parents stated that children disliked that they needed to stop playing in order to take their medications. Several parents believed that since their child has learned how to use the inhaler without the spacer, they no longer needed the spacer. Typically, parents had not discussed their concerns or opinions about the medications with the child's physician.

3) Parental Challenges to Managing Asthma: Many parents described challenges to managing their child's asthma. Several parents brought up difficulties of being a single parent including bringing children to after-school PA or staying in the hospital with the child with asthma while balancing care of the other children. Many also mentioned feeling "helpless" when it comes to the child's asthma. Parents discussed how their quality of life is negatively impacted by their child's asthma.

COMMUNITY (NEIGHBORHOOD, SCHOOL) LEVEL BARRIERS—There were four themes within the community (neighborhood, school) level of the SEM: (1) Lack of trust in proper asthma management in schools, (2) Lack of school PA facilities, (3) Unsafe neighborhoods, and (4) Cost of community PA programs. Supportive quotes are included in Table 4.

1) Lack of Trust in Proper Asthma Management in Schools: Many parents stated that they do not trust the school to adequately manage their child's asthma. Therefore, they choose to keep their child at home when the child has asthma symptoms. Most parents claimed that the school nurse knew about their child's asthma because of the Asthma Medication Administration Form (AMAF), but were not sure if the rest of the school personnel (e.g., classroom and physical education (PE) teachers) were equally informed. The AMAF is a physician-completed form listing the asthma diagnosis and the medications to be administered by the school nurse. Several parents struggled with the form submission, blaming difficulty in getting physician appointments or school administration losing the completed document.

Parents worried about their children having an asthma attack during PE class or an after-school program. Parents were not comfortable with the lack of asthma management training available for the PE teachers and after-school staff. They were also concerned that there were no school nurses available during the after-school hours.

Parents said that the school policies regarding children carrying their own medications were unclear. Some parents were told by the school personnel to keep the medications in the nurse's office and others believed that the children could carry the inhalers themselves. Several parents said that they allow their children to carry their own medication, despite the school's policy against it.

The parents who were satisfied with the way their children's asthma is managed at school believed this comfort was due to good communication they had with the school personnel.

They were comfortable having their children partake in PA because they felt the PE teachers, aware of the child's asthma, would be monitoring for asthma symptoms.

2) Lack of School PA Facilities: Many parents stated that children only had PE class once or twice a week. They were not sure if the child was participating in the class or what activities were being done. Several parents mentioned that the lack of PE classes is due to the absence of necessary facilities or problems scheduling time in the gymnasium, which is shared with another school.

3) Unsafe Neighborhoods: Nearly half of the parents reported living in an unsafe neighborhood. They mentioned gang activity, gun violence, and drugs as routine occurrences in their communities. Out of fear for their child's safety, parents said they felt they had no choice but to keep children at home where the children were mainly sedentary. Many mentioned that although there are parks in their neighborhood, they preferred having their children go to play in parks further away due to these safety concerns.

4) Cost of Community PA Programs: Half of the parents mentioned the financial burden and/or the lack of affordable after-school exercise programs as barriers to their children's PA. They said that they could not find free community-based PA programs for their children.

DISCUSSION

In this study, we identified unique barriers to PA in inner-city children with asthma within interpersonal (parent, family) and community (neighborhood, school) levels of the SEM. Globally, we found that parental beliefs about PA's effect on asthma, rather than asthma severity itself, were the main barriers to PA. At the interpersonal level of the SEM, we observed three prominent barriers to PA: 1) parental fear of EIA due to child's lack of symptom awareness; 2) child's refusal to take medications and parental non-adherence to administering asthma medications; and 3) challenges to asthma management. At the community level, we identified four barriers to PA: 1) lack of trust in school asthma management; 2) lack of school PA facilities; 3) living in unsafe neighborhoods; and 4) cost of community PA programs.

There is a paucity of literature examining barriers to PA in urban minority children with asthma. Lang et al. found that in urban inner-city children with asthma, disease severity and parental beliefs regarding exercise and asthma predicted activity levels.⁹ In a systematic review of PA among children with asthma in the US and other countries, lack of teacher knowledge about asthma and exercise was an important barrier.¹² Our work extends these findings by demonstrating additional barriers to PA that previously have not been explored.

At the interpersonal level, parents in our study expressed fear that children could not recognize their asthma symptoms during onset of an EIA exacerbation. Parents reported their children refusing to take asthma medications and shared their perception that children may become dependent on the medications. This concern about dependence prompted parents not to administer medications. Some parents acknowledged that being a single mother and having limited support impeded their ability to manage their child's asthma.

Our findings substantiate previous research examining child and parent perspectives about asthma as a barrier to PA. In particular, parental fear of EIA has been shown to limit their child's PA.^{8,9} While no parents in our study believed that children with asthma could not participate in PA, there were many who placed unnecessary restrictions on their child's exercise due to fear of EIA. Parents described a constant balance they are trying to strike between allowing sports participation due to known health benefits of PA, and protecting the children from the dangers of asthma attacks by limiting PA. To address this barrier, both children and parents should receive education on recognizing asthma symptoms, the known benefits of regular exercise on asthma outcomes,^{3,4} and learn how to prevent EIA symptoms. This education can take place at the child's physician's office and at school. In the clinic setting, providers should identify children with EIA and educate about the use of pre-exercise bronchodilators as per asthma management guidelines.¹ In the school setting, nurses can also provide this education. Providers can communicate with the school the importance of using pre-exercise bronchodilator treatment via the AMAF. Parents need to be better informed that asthma, when well controlled, does not limit PA³ and their reservations need to be reframed into a discussion of proper asthma management.

Adherence to asthma medications controls symptoms¹ allowing children to participate in PA along with their peers. Parents in our study were fearful of the medication side-effects and limited daily preventive medication administration prescribed by the child's physician. Promoting asthma medication adherence should be an important part of targeted efforts to enhance PA among children with asthma. Therefore, it is important that providers and school nurses explore the parents' reservations and correct the possible misinformation about asthma medications. School administration of preventive medications improves symptom-free days and leads to fewer days with limited activity and may be an option for students with poor adherence.¹⁹

Single parents of children with asthma often contend with a range of stressors that decrease their ability to manage their children's asthma effectively.^{20,21} Parents in our study described challenges of single parenthood and asthma management. Social support for these families may improve asthma management. Community health worker²² and peer²³ models can provide additional resources and support to improve asthma outcomes.

At the community level, the most prevalent barrier to PA was the parents' lack of trust in the school personnel to manage their children's asthma. Other studies suggest that both children and their parents feel that school personnel are ill-equipped to manage asthma.¹⁰⁻¹² Studies have found that teachers report feeling uncomfortable with managing children with asthma due to lack of training and clear policies on asthma management.^{24,25} Annual in-service asthma training for all school personnel may increase teacher knowledge and confidence in managing acute asthma attacks. Prior literature has shown that using didactic means or video instruction are effective in educating teachers about identifying asthma symptoms.²⁶ An assessment tool measuring teacher efficacy and confidence around managing asthma at school²⁷ may track teacher progress and contribute to an asthma-friendly school environment.

Parents doubted that school personnel, other than the nurse, even knew that their child has asthma. Parental comfort around their children's PA participation improved when all parties were informed of their child's asthma. Therefore, parents should make an effort to talk to all school personnel involved in the child's management of asthma. It is imperative that schools have an efficient way to streamline communication to ensure that all relevant parties are well-informed about which children have asthma. Sharing a list of students with asthma among school personnel may help improve this process.²⁸

Parental reports of the absence of clear policy around in-school asthma medication management was consistent with other studies.^{10,11} The child should be allowed to carry and self-administer the inhaler in school if the proper documentation (AMAF) is provided²⁹ and the child's physician, parent, and school nurse agree that the child can do so "in a responsible and secure manner."³⁰ Quick access to asthma medications may positively contribute to the pre-exercise medication administration and provide rapid relief if the child develops EIA during PE class or recess.

Community-level barriers to PA in healthy children include certain neighborhood characteristics (e.g., absence of sidewalks, heavy traffic) and limited access to facilities (e.g., parks, gym).³¹ In our study, we identified neighborhood safety and lack of affordable after-school PA programs as key community-level barriers to PA. These barriers are not unique to children with asthma and have been reported as barriers to PA in children without asthma living in low-income communities.¹³ Primary care providers need to be aware of these barriers when instructing parents to have children spend time exercising outside in local parks or in local PA programs. Advocacy efforts should be made by community and city officials to ensure safety of the parks and availability of more affordable after-school PA programs. Multi-sector partnerships between community and local government groups have led to the development of sustainable built environments, resulting in increased outdoor PA.³² Provision of in-school PA opportunities may be useful in low-resource schools without PA facilities as well as communities with high crime rates and limited after-school PA programs. In-school PA may be the only opportunity for these children to be active. Such programs may include classroom-based activity breaks³³ and Mighty Milers,³⁴ a running program for schoolchildren to prevent obesity.

Our study has several limitations. While the majority of the school population resembles the study sample on important sociodemographic characteristics,³⁵ our sample was self-selected, and only English-speaking parents were included in the study. By excluding non-English speaking parents, our findings are limited to perspectives of English-speaking parents. We also only recruited parents of children attending inner-city public schools. Therefore, the results may not be fully representative of all parents of schoolchildren with asthma or schools in different communities. Additional research is necessary to determine if the barriers to PA we discovered are observed in other communities. In addition, we can only report on the information that was elicited from participants and our interpretation of these data.

CONCLUSIONS

The results from this qualitative study of parents of urban, minority children with asthma indicate a complex set of interrelated barriers to PA on interpersonal and community levels of the SEM. Because of the multidimensional nature of the problem that parents identified, single-solution approaches to enhance PA in children with asthma are likely to have only a limited impact. Our findings can inform multi-component school-, clinic- and community-based interventions aimed at improving PA in children with asthma. We advocate to address this issue by engaging all stakeholders, including the children, parents, classroom and PE teachers, school nurses, primary care providers, and community and government officials. Taking a more comprehensive approach, involving all of the relevant parties, may have the greatest impact on improving PA levels in children with asthma.

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ABBREVIATIONS

SEM	Socio-Ecological Model
PA	physical activity
BMI	Body Mass Index
EIA	exercise induced asthma

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WHAT'S NEW

This qualitative study provides important information about parental perspectives on barriers to physical activity (PA) in children with asthma. Multi-component interventions to address these barriers may improve PA in this population.

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Table 1

Interview Guide.

1	What things does your child do after school? Does your child have any after-school activities? What after-school activities does your child participate in? How often?
2	Does your child play outside? Please describe.
3	Are you comfortable with your child playing outside around your home? Please explain.
4	Tell me about the last time when asthma was a problem? Describe what happened.
5	Does your child's asthma affect his/her activities in any way?
6	Are there things about her/his asthma that worry you?
7	Does your child have a gym class in school?
8	Can you describe what you know about activities/what happens during the gym class? How often is it held?
9	Do you know if your child participates in gym like any other child his age would? Does he ever tell you about gym class or what they do during class? How do you feel about your child participating in a gym class?
10	Can you describe what your child does during a recess at the school?
11	Does your child participate in any sports? What type of sports? Does your child participate in sports regularly? How often?
12	How do you feel about your child participating in sports activities? Is there any sports activity you would not want your child to participate in? Why not?
13	Do you worry that your child will have an asthma attack while playing sports? Tell me about what you worry about.
14	Had your child ever had problems with asthma while playing sports or being physically active? Describe what happened.
15	Do you take any precautions to ensure your child's asthma is managed in school? What do you do?
16	How do you feel about how your child's asthma is managed at the school? How do you feel about the school's ability to manage your child's asthma?
17	How does your child feel about taking the asthma medications?
18	What it's like giving the child his/her asthma medications?
19	Are there any good or bad things about giving your child asthma medications?

Table 2

Socio-demographic characteristics of parents and children with asthma attending elementary schools in Bronx, NY (n=23 participants; parent-child dyads).

Characteristic	n (%)
PARENTS	
Mean age, years (SD)	35.3 (6.0)
Female gender	21 (91.3)
Educational level	
Less than high school	2 (8.7)
Graduated high school or got GED	7 (30.4)
1–3 years of college	10 (43.5)
4-year college degree or more	4 (17.4)
Ethnicity	
Hispanic/Latino	19 (82.6)
Not Hispanic/Latino	4 (17.4)
Race	
African-American	4 (17.4)
White	2 (8.7)
More than one race	1 (4.3)
Unknown	16 (69.6)
Parent country of birth	
USA	12 (52.2)
Other (Dominican Republic, Puerto Rico, Virgin Islands, Jamaica)	11 (47.8)
Parent is employed	13 (56.5)
Single-parent household	8 (34.8)
Other family member(s) have asthma	17 (73.9)
CHILDREN	
Mean age, years (SD)	9.3 (0.8)
Female gender	12 (52.2)
Child prescribed preventive/controller asthma medication	14 (60.9)
Child's Asthma Severity Level^a	
Intermittent	6 (66.7)
Mild Persistent	2 (22.2)
Moderate Persistent	1 (11.1)
Severe Persistent	0

Characteristic	n (%)
Child's Asthma Control Level^b	
Well Controlled	1 (7.1)
Not Well Controlled	12 (85.7)
Very Poorly Controlled	1 (7.1)
Child's Medical Insurance	
Public (Medicaid)	17 (73.9)
Private	6 (26.1)

Percentages may not equal to 100% due to rounding

^a Asthma severity was assigned for 9 children who were not prescribed controller asthma medications. Percentages were calculated based on $n_{\text{total}}=9$

^b Asthma control level for 14 children who have been prescribed preventive/controller asthma therapy. Percentages were calculated based on $n_{\text{total}}=14$

Interpersonal (parent, family) level barriers to physical activity and associated parental quotes

Table 3

1. Parental Fear of EIA Due to Children's Lack of Symptoms Awareness	<p>"I like that she try a sport, but I get scared at the same time that she can get the asthma making a sport. I get scared... That she make exercise for a long time and she don't recognize when she's short of breath and she can get a asthma attack." (Mother, 6)</p> <p>"My concern is that she will lose her breath, and fall on the floor and collapse and no one is going to notice because she's not going to tell you that her chest hurting her or if she can't breathe because she wants to control that and continue playing." (Mother, 9)</p> <p>"I'm more afraid of the baseball and all that soccer thing—because of the running around a lot, I've noticed that that's what get's her asthma more activated. You know it just triggers it." (Mother, 8)</p> <p>"Once he gets to the point that he can tell me, "I can't breathe," I think I'll be a little more relaxed because I'll feel like I won't have to be looking at the signs." (Mother, 5)</p>
2. Children's Refusal and Parental Non-adherence to Asthma Medications	<p>"She tells me, I don't want to get no treatment, I don't want my pump... She says that she's tired of the treatment already." (Mother, 7)</p> <p>"She gets frustrated that she has [asthma]... She gets frustrated taking the medicine, going to the hospital all the time." (Mother, 11)</p> <p>"They get hyper. They can get addicted to the medicine. Sometimes they depend too much on their medication. So that's why I don't want that they get to that point too dependent on the medication. I want that they learn how to breathe... I try to give as less medication as possible. Because I have experience with one nephew that my sister start giving the medication, and that complicated his asthma. The more medication she gave him, more worse he get." (Mother, 6)</p> <p>"[The doctor] wanted to give him daily medication and I refused... Pumping them up with all kinds of different types of steroids and inhalers is just not going to work. Their body needs to learn to function without all this stuff." (Mother, 15)</p>
3. Parental Challenges to Managing Asthma	<p>"I got to be careful. I don't want to take the risk. That she got get asthma that she got to get hospitalized again. I [am] a single mother with two kids... what supposed to do with the other one so I trying to keep both healthy... And I don't got nobody to help me so its hard." (Mother, 1)</p> <p>"I was going to sign him up this September for basketball because he seems to really like it. But he's doing his first communion also. And it's just too much for me because I have the baby..." (Mother, 5)</p>

Table 4

Community (neighborhood, school) level barriers to physical activity and associated parental quotes

1. Lack of Trust in Proper Asthma Management in Schools	<p>"I keep my children home and I administer [medications] to them myself, and every 4 hours I put them on the nebulizer depending on how they are....And these people do not do their jobs, so I will take my children home." (Mother, 15)</p> <p>"It's good that they have gym at the school. But I want that they have a limitation for the kids with asthma, too...I want the gym teachers know what to do in that moment with a kid with asthma...It would be nice that they take training." (Mother, 6)</p> <p>"If I'm not around and she's at school and she is running too much...that worries me because what if I'm not there and she gets an asthma attack...The after school, I don't think they know the signs,, I forget what they said but it was something that they, they don't have the experience or the knowledge, you know, like how to deal with that." (Mother, 22)</p>
2. Lack of School PA Facilities	<p>"In school, we don't have um gym the way we're supposed to...Half the gym is either in the classroom if you're lucky if the gym is open 'cause we share it with another school...As I was growing up, we had a lunch room where you would eat and then go outside and play. Here we don't have that. We basically you eat your lunch and you sit down." (Mother, 10)</p> <p>"No, they can't go outside cause they working in the yard again! They just fix the school yard and the kids don't even get to play in it, now they working on the building." (Mother, 23)</p>
3. Unsafe Neighborhoods	<p>"I don't like the neighborhood park. And um, I mean, I live in the projects...Drugs, violence, shoot out. I don't want her around that environment." (Mother, 11)</p> <p>"The reason that we live in that community because is a building that we don't pay that much rent. Is a project and then that's the reality. Is sad but this is, that's why I keep them by...home. They got toys and they got their TV to be able to play like that they don't feel like going out. I know they need to exercise but also have to limit that because all the things that happens you know in the community over there... Yeah they shoot gun, you know, the teenagers are outside." (Mother, 12)</p> <p>"There's a park across the street. I let him go before with my neighbor's daughter, but I'm not too comfortable because they're not supervised... 'Cause anything could happen." (Mother, 2)</p>
4. Cost of Community PA Programs	<p>"He's looking to do karate. And if I had the money for it now, I probably would sign him up for it, you know, if I could afford to do that." (Mother, 5)</p> <p>"I want to get her into a dance class because she likes dancing a lot but I'm looking for something a little cheap because they are kind of expensive." (Mother, 8)</p>