Healthy Families: Reduce the Myths and Prevent the Illnesses

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December 1, 2010

Sheltering Arms is a non-profit early childhood education center founded in Atlanta, GA in 1888 by a group of volunteers. Their mission is, “to serve working families with high quality, affordable child care and education and comprehensive support services, as well as to provide professional development for early childhood educators and community outreach.” The program accommodates children up to 5 years old. There are 17 centers in seven metro-Atlanta counties. The Early Learning and Literacy Center at Dunbar Elementary School is stationed in Fulton County. According to the director, Mr. Steve White, Sheltering Arms at Dunbar Elementary School opened in January 2010, serving 91 families and 176 children. Ninety-nine percent of the families in the Dunbar Center receive financial assistance from Head Start. The center provides a very vital contribution to the community by providing early childhood education at little to no cost. Early childhood education has been shown to correlate with positive educational and social outcomes in children from low-income households (Reynolds et. al., 2001).

The resource and learning center serves families of the Neighborhood Planning Unit-V, which includes Mechanicsville, Peoplestown, Capitol Gateway, Pittsburgh, Adair Park, and Summerhill:

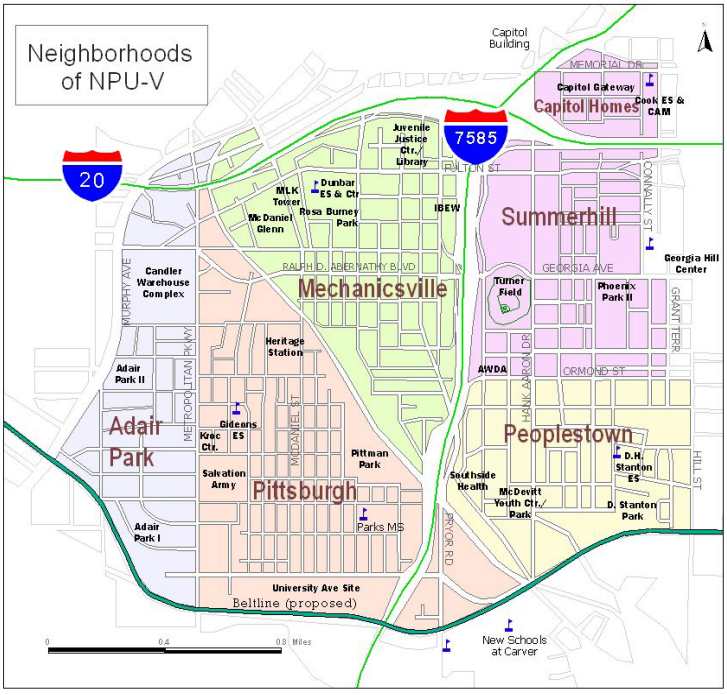

Figure 1: Map of Neighborhood Planning Unit-V

After we made a preliminary observation of the community, we observed that there is only one healthcare facility, Southside Medical Center. Members of the community expressed concern that the medical center, being across the highway, makes it difficult to access because of the lack of transportation. It was also observed that there are an adequate amount of parks for children to play in and many locally owned grocery/corner stores but no large grocery chains. Other local resources will be discussed in the results section. Contrastingly, the community has access to many programs including the Dunbar Center, located beside the Sheltering Arms Dunbar Center; the Center for Working Families; the Center for Black Women's Wellness; the Community Garden; and the Salvation Army and its many entities. These programs are dedicated to addressing social problems of the community. We did not observe any resources in the community that seem to address the mental healthcare needs of the community. Mental health of parents is a crucial public health issue since it affects the behavior and development of children (Beardslee et. al., 2003). Such disengagement in the parent-child relationship may lead to a negative effect in the long-term social and academic development of the child (Brook et. al., 2010).

According to the Journal of the American Medical Association, asthma, cystic fibrosis, obesity, malnutrition, cerebral palsy, low birth weight, and mental illnesses are prevalently seen in children across the nation. The demographics for Fulton County are detailed in Table 1.

Table 1: Fulton County Demographics

	Fulton County	Average County in Georgia
Population	1,014,932	60, 917
% White	51.2	69.7
% Black	42.7	28.1
% Other	4.75	1.3
Birth rate (per 1000)	13.9	14.7
Teen Pregnancy (per 1000)	30.5	40.7
Unwed Birth Total	6,600	409
Unwed Birth %	47.8	46.7
Death Rate	572.6	949.6
Disability % (Ages 18-64)	18.2	23.8
STD Rate (per 1000)	921.3	596.9
% of people below poverty level	14.9	19.1
% Avg Unemployed	6.4	6.9
Person:Physican Ratio	239.9	1581.7

It was necessary to employ some assessment methods in order to understand the health concerns of this community as it relates to the demographics and resource availability.

Methods

Different methods were employed to gather information about Neighborhood Planning Unit V (NPU-V). Groups of three to four students were randomly assigned to one of the six neighborhoods of NPU-V: Mechanicsville, Peoplestown, Adair Park, Summerhill, Pittsburgh, and Capitol Gateway. Each group carpooled to conduct a windshield survey for approximately one hour to gather data about the community including quality of homes, public meeting places, and access to different resources. While one student drove, the others navigated and recorded the observations. Guidelines were used to help with the consistency and comprehensiveness of the data collection of each group. The windshield surveys were completed on September 22, 2010 at 4:00 p.m.

The next method of data collection was a key informant interview. The key informants were chosen as representatives of the community and the Sheltering Arms Center. For example,

bus drivers, teachers, nutritionists, family planning coordinators, and the center director of Sheltering Arms were used as key informants. Each student was assigned one key informant and scheduled their own interview time either in person or on the phone. Then, a question bank of approximately 33 questions was compiled and each student chose roughly ten questions for the interview. These questions were modified to accommodate the knowledge base of each key informant. The interviews lasted roughly thirty minutes and were held during the week of September 29, 2010.

The focus groups were composed of six stakeholders in the community who were willing to share their opinion about NPU-V. Letters explaining the purpose of the focus group were sent home with the children on October 12, 2010 and posters were hung up around the center as further advertisement to recruit participants. Furthermore, a few students volunteered to encourage parents to participate in the focus group on the day the focus groups were held. The focus groups, on October 20, 2010, lasted for one hour at Sheltering Arms and refreshments were served. In each focus group, two moderators led the discussion while two recorders transcribed. At this point, all data from the windshield surveys, key informant interviews, and focus groups was entered into a central document for record keeping.

Lastly, survey questions were developed from the information gathered from the key informant interviews and the information gathered from the focus groups. These questions were compiled and edited by the entire group. The survey was 22 questions long and was limited to one page, front and back. The surveys were distributed to the parents on November 9, 2010 and were collected on November 11-12, 2010. A few members of the group stood in the lobby of Sheltering Arms on November 11, in the afternoon, and asked parents to fill out surveys in order to increase the return percentage. Once all the surveys were collected, the data was entered into

an excel spreadsheet then compiled to be statistically analyzed by SPSS v15.0 for Windows. Simple descriptive statistics (frequencies and distributions) were analyzed for the survey data.

The participants for all of these data collection methods were members of the NPU-V community, families of Sheltering Arms and the staff of Sheltering Arms. A majority of these participants appeared to be African-American and all of the participants were adults.

Results

Windshield Survey

The community surrounding Sheltering Arms was divided into six different zones and surveyed by students. The zones surveyed included Adair Park, Mechanicsville, Peoplestown, Pittsburgh, Capital Gateway, and Summer Hill. Observations of the surrounding communities consisted of predominantly African-American populated urban and residential areas. Refer to Table 2 for the results of the windshield survey.

Table 2: NPU V Windshield Survey Results

Windshield Survey Results	
Green Areas/ Parks	Dunbar Neighborhood Facility Grant Park Pittman Park Bonnie Brae Park Rosa L. Burney Park Pool
Educational Establishments	Sheltering Arms Genesis Early Learning Center Evangeline Boothe College Crogman School of Arts Summer Hill Public Library
Medical Facilities	Southside Medical Center
Industrial Businesses	Schnitzer Steel Industries Southern Freight
Merchants	Package Stores Convenience Stores Auto Mechanic Shops Beauty / Barber Shops
Housing	Single Family Homes Several Apartment Complement Complexes / Housing Developments Several abandoned and blighted properties

	Gentrification / Mixed Income Properties
Health Implications / Social Climate	Frequent Industrial Exposures Lack of Grocery Stores Unattended Children and Teens Significant Homeless Populations

Key Informant Interviews

Among the faculty and staff at Sheltering Arms Dunbar Center, there were 14 individuals interviewed as key informants. The backgrounds of these individuals varied from educators to child and family specialists, which provided a variety of perspectives when answering the interview questions. From these interviews, we were able to obtain qualitative data for our needs assessment as described below.

The key informants spoke of the establishment of Sheltering Arms in this community as a way to provide adequate childcare for children of working parents. The center aids children in learning manners, healthy behaviors, and healthy nutrition. The key informants believed that there was a lack of parental involvement in their children's education and health. They stated that parents typically do not engage in school activities or meetings unless there is an incentive or benefit provided. When asked about undiagnosed and unresolved health issues, the key informants cited runny noses, asthma, and possibly ADHD. When asked about the greatest health risks of the community, the key informants cited teen pregnancy, mental health issues, hand washing, and the lack of organized physical education classes at the center. Finally, when asked about community assets, the key informants cited the Center for Working Families, Center for Black Women's Wellness, and the Community Garden at the Dunbar Center.

Focus Group I

The first focus group consisted of six individuals, five women and one man. Several questions were asked of the participants and there were a few overriding themes. When asked,

"How accessible is healthcare in your community?" there were varying responses received. Some individuals stated that Southside Medical Center provided all of the healthcare services that an individual may need. Others had a different perspective, stating that they were treated a "certain way" at a different hospital based on the type of health insurance they had. One example of poor treatment given was an individual stating that he had to wait 36 hours on a gurney after a car accident and was sent home with Motrin.

When asked, "What are some of the biggest health concerns you and/or your children face today?" there were three overriding themes. First, parents stated that there were several intervention programs in place for the kids but not enough for the parents. Second, the parents stated that there was too much focus on sickness and not enough focus on wellness. Third, it was stated that black men are more apprehensive about receiving healthcare.

Focus Group II

The second focus group participants were six females consisting of Sheltering Arms staff and parents. Within the focus group, participants discussed their views on an array of topics such as current and future educational obstacles for the students and the struggle for parent involvement. When asked about their overall views of Sheltering Arms, the parents stated that they were satisfied with Sheltering Arms as an early childhood learning center and were pleased with both the knowledge and activities being offered to their children. However, there were some parental concerns about the style of learning at Sheltering Arms. Several parents worried that because the children learn through play, they may be lacking structure and could possibly have a difficult time transitioning into other forms of learning later in their education. In addition, the parents did express some concerns about teacher/parent relationships at the center. Parents expressed concerns that teachers are not informing parents and students of the lesson

plans. Furthermore, parents were worried that teachers were not concerned with the students failing. Lastly, the parents stated that they believed several of the teachers were forming opinions about them prior to meeting them. The parents felt they were being stereotyped and as a result, their children were as well.

When asked about some educational obstacles the parents and staff believed the current students of Sheltering Arms may face in the future, parents were mostly concerned with tests that the children were required to take in order to progress to the next grade level. In addition, the staff member present stated that she received some negative feedback from parents of former students about their struggle transitioning to a different learning format in Atlanta Public Schools. Parents, however, were concerned about Atlanta Public Schools as a whole and questioned if the educational resources available were adequate. When asked to mention any long-term educational goals the parents had for their children, several stated bachelor's and master's degrees as primary goals. The majority of the participants were concerned with the level or lack of parental involvement at Sheltering Arms. Participants stated that all parents should be held responsible for their children's education. Several believed the cause of this issue was a "generational problem," and a wave of teen pregnancies resulted in several mothers who do not possess the necessary skills to be a parent. Participants proposed the idea of a mentoring program for teen mothers at Sheltering Arms. Parents and staff believed teen mothers were not fully aware of all the resources available to them and that Sheltering Arms could serve as a resource center.

Healthy Families Survey

There were 65 surveys received but only 63 of them were analyzed. Two surveys were omitted because the same parent/guardian filled it out twice. Many responders failed to complete

the second page of the survey so these unanswered questions were not included in the total response denominator. All values and percentages are based on valid responses where unanswered responders were omitted from the total response denominator.

The mean **(μ)** age for parents/guardians who returned the survey was 28-years old (Standard deviation (δ) =6.6) [Figure 2] and all but one responder identified themselves as being Black: (Black: *N*=56 (98.2%); Native American: *N*=1 (1.6%)).

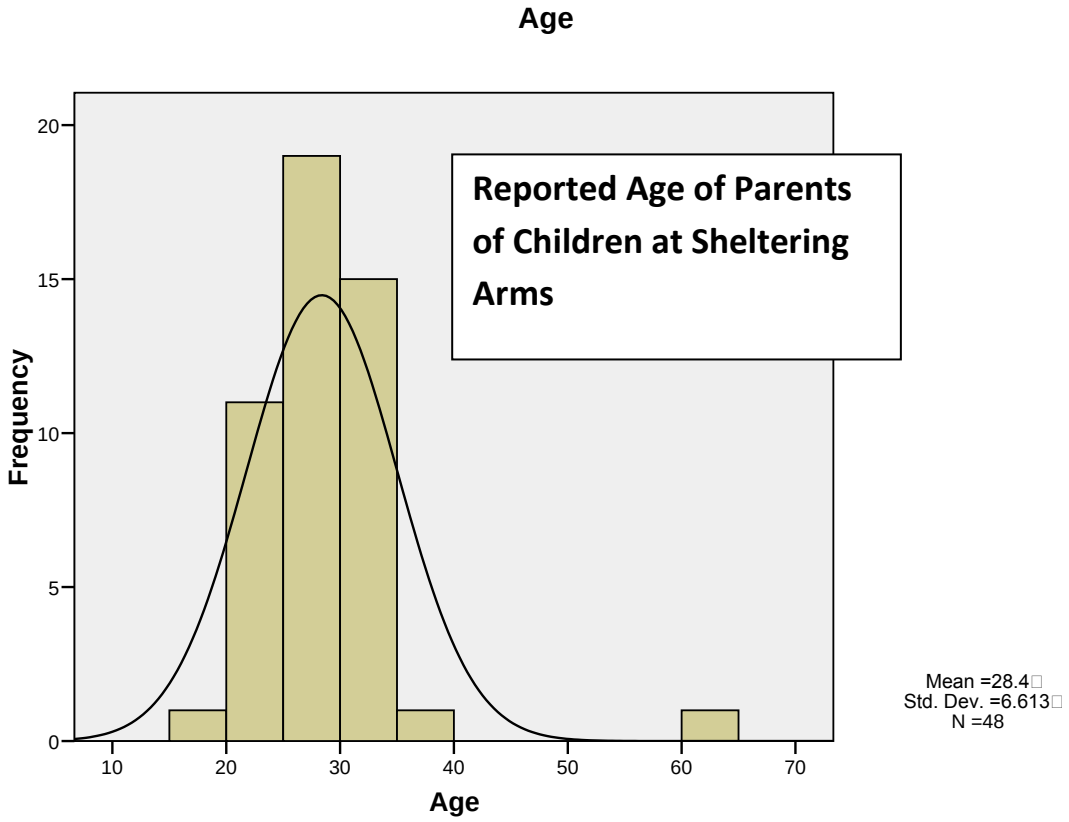

Figure 2: Gaussian Distribution of Reported Age of Parents of Children at Sheltering Arms with normal curve

Out of the valid responses, 17.2% responded that they had not completed high school, 38.2% had a high school diploma or GED, 27.6% completed some college or technical/vocational training, and 22.4% had college degrees [Figure 3].

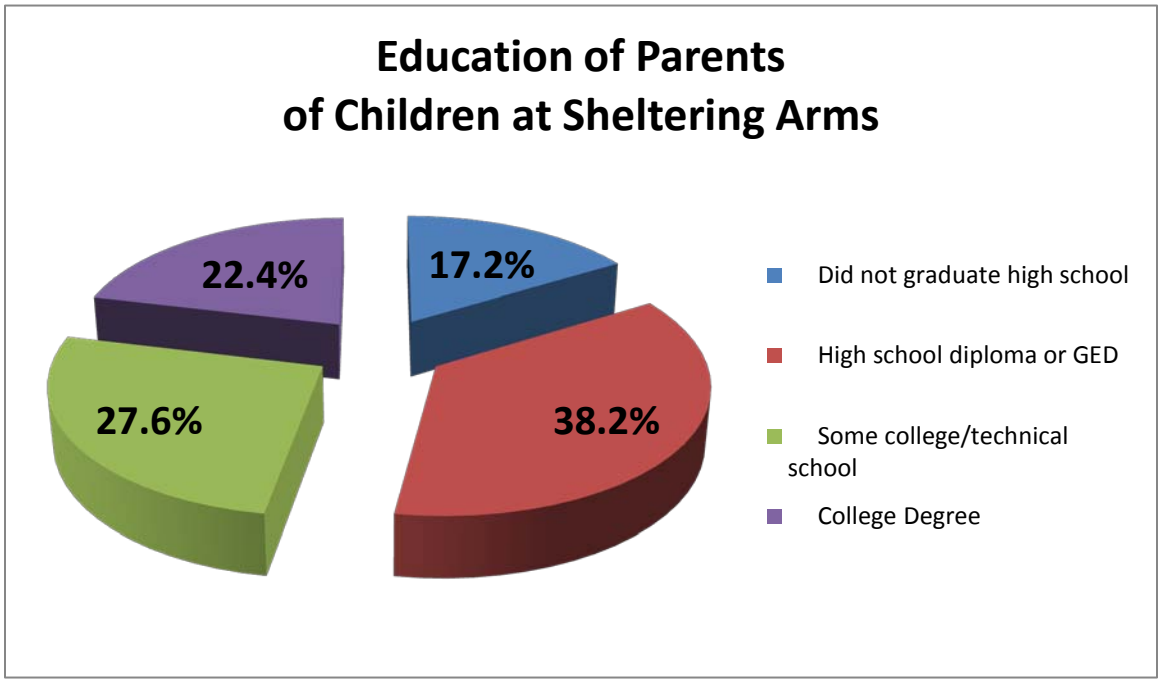

Figure 3: Reported Education Levels of Parents of Children at Sheltering Arms

In order to assess the daily lives of the parents/guardians of the children at Sheltering Arms, they were asked to answer the question, "What does your day consist of?" 41% of caregivers responded having full-time jobs while only 5.4% were full-time students, and 23% reported being part-time students [Table 3].

What does your day consist of?	% of "Yes" Responses
I work full time	41.1
I work part-time	19.6
I am a full-time student	5.4
I am a part-time student	23.2
I am unemployed	32.1

Table 3: Responses to questions regarding employment status

Eighty-seven percent of responders were women and approximately 62% were single. Of those who were single, 39% are receiving help from family members or significant others and 61% are raising their children with no help at all [Figure 4]. The average number of children was

approximately 2.6 (δ=1.35) children per household or parent and the average age of the parent at first child birth was 21 (δ=3.94) [Table 4].

Items	*N**	μ	δ
Number of Children/household	**57**	**2.6**	**1.35**
Age at first child birth	**57**	**20.6**	**3.94**

Table 4: Number of children/ household and age at first birth as reported by parents/guardians of children at Sheltering Arms. *N*refers to the number of parents/guardians who responded to the question. Those who did not respond were omitted.*

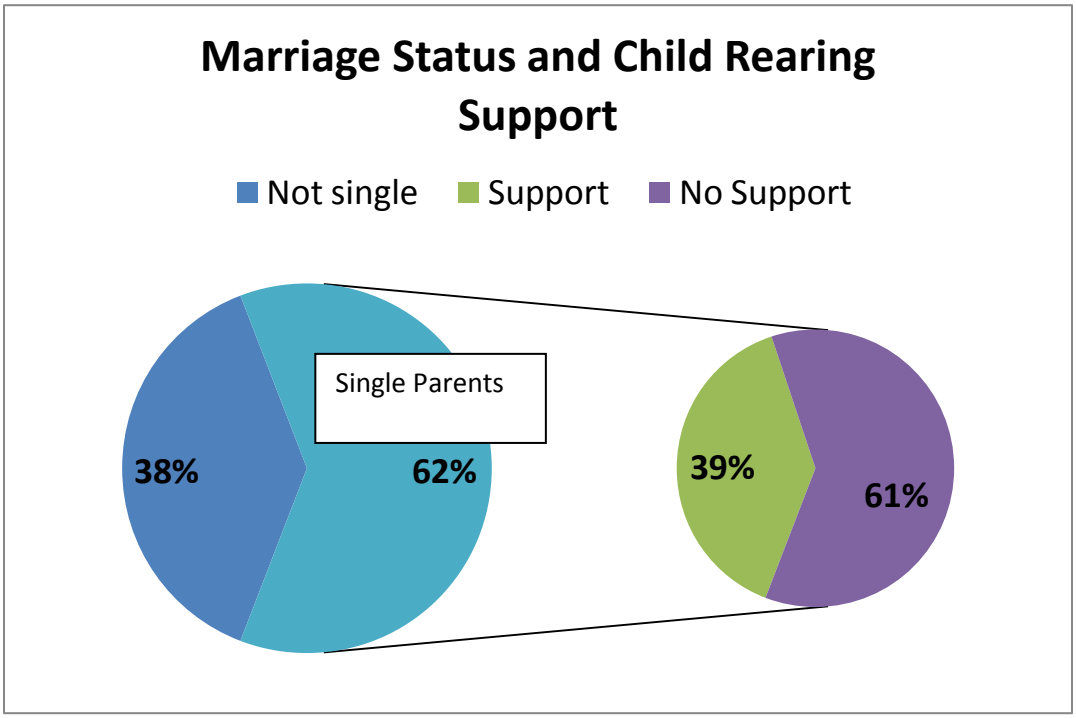

Figure 4: Percentage of single parents at Sheltering Arms and the amount of support they receive in rearing their children

The majority of the surveyed participants receive Medicaid (65%) and Peachcare (10%) while very few received insurance through their jobs (15%) [Figure 5].

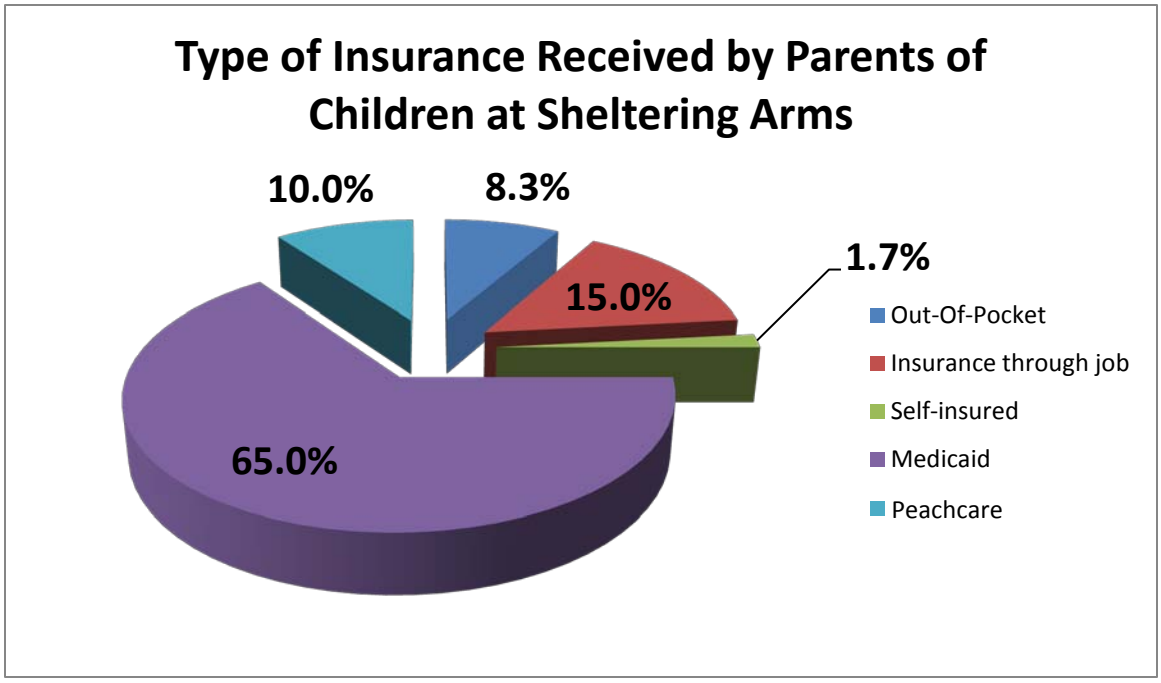

Figure 5: Reported source of Health Insurance by Parents at Sheltering Arms

The main reasons preventing parents/guardians and/or their children from receiving healthcare resided in not having the adequate insurance and not having the money to pay for healthcare [Figure 6].

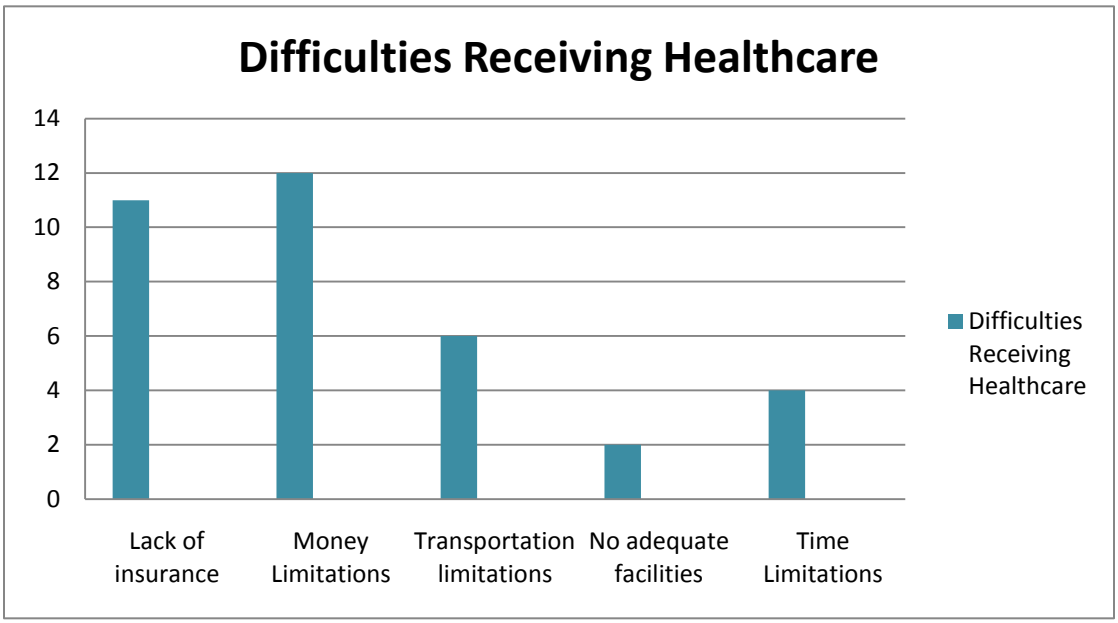

Figure 6: Reported Difficulties Receiving Healthcare by Parents of Children at Sheltering Arms

Parents/guardians were asked "How satisfied are you with the healthcare services available for your child?" most responded that they were satisfied with the healthcare services available for their children (37% Very satisfied; 18% Somewhat satisfied). When parents/guardians were asked to respond to the statement, "I understand when my child is becoming too sick and needs to see a doctor", many said they understood when their child's illness warranted seeing a physician (71% Always). Additionally, most parents reported that when their child was sick, they sought out the physician (49% Always; 32% Almost Always) in response to the question, "When your child is sick, how often do you take them to the doctor?" [Table 5].

Response Choices	***N****	**%**
Satisfaction with available Healthcare services		
Very satisfied	37	60.7
Somewhat satisfied	18	29.5
Neutral	4	6.6
Somewhat unsatisfied	2	3.3
Knowing when child is too sick and needs to see a doctor		
Always	42	71.2
Almost Always	7	11.9
Sometimes	6	10.2
Almost Never	2	3.4
Never	2	3.4
When child is sick, how often they see a doctor		
Always	30	48.4
Almost Always	20	32.3
Sometimes	12	19.4

Table 5: Responses to several questions regarding healthcare and parental/guardian response to child's health. ***N**refers to the number of parents/guardians who responded to the question. Those who did not respond were omitted.*

Among common symptoms experienced in the pediatric community, caregivers of children at Sheltering Arms reported their children having a runny nose (3% most of the time; 19% often; 62% sometimes), wheezing and/or difficulty breathing (13% often; 18% sometimes) and cough (15% often; 68% sometimes) to be the most common. Other symptoms that were reported often among children at Sheltering Arms were fever, ear pain, diarrhea, and watery/crusty eyes. See Table 6 for results.

Table 6: Symptoms experienced by children at Sheltering Arms, as reported by their parents/guardians

Items	*N**	%
Runny Nose/Congestion		
Most of the time	2	3.2
Often	12	19.0
Sometimes	39	61.9
Almost Never	9	14.3
Never	1	1.6
Wheezing/Difficulty Breathing	8	13.3
Often	11	18.3
Sometimes	19	31.7
Almost Never	22	36.7
Never		
Cough		
Often	9	15.0
Sometimes	41	68.3
Almost Never	7	11.7
Never	3	5.0
Fever		
Often	3	5.2
Sometimes	19	32.8
Almost Never	24	41.4
Never	12	20.7
Ear Pain		
Often	3	5.0
Sometimes	15	25.0
Almost Never	11	18.3
Never	31	51.7
Diarrhea		
Often	1	1.7
Sometimes	15	25.0
Almost Never	16	26.7

Never	28	46.7
Watery eyes/crusty eyes		
Often	2	3.2
Sometimes	8	12.9
Almost Never	16	25.8
Never	36	58.1

*N*refers to the number of parents/guardians who responded to the question. Those who did not respond were omitted.*

Although many parents indicated that they are aware of when their children aren't well, when asked if they would be interested in learning more about what signs to look for when their child/children are becoming sick, nearly 60% responded that they would be very interested [Figure 7].

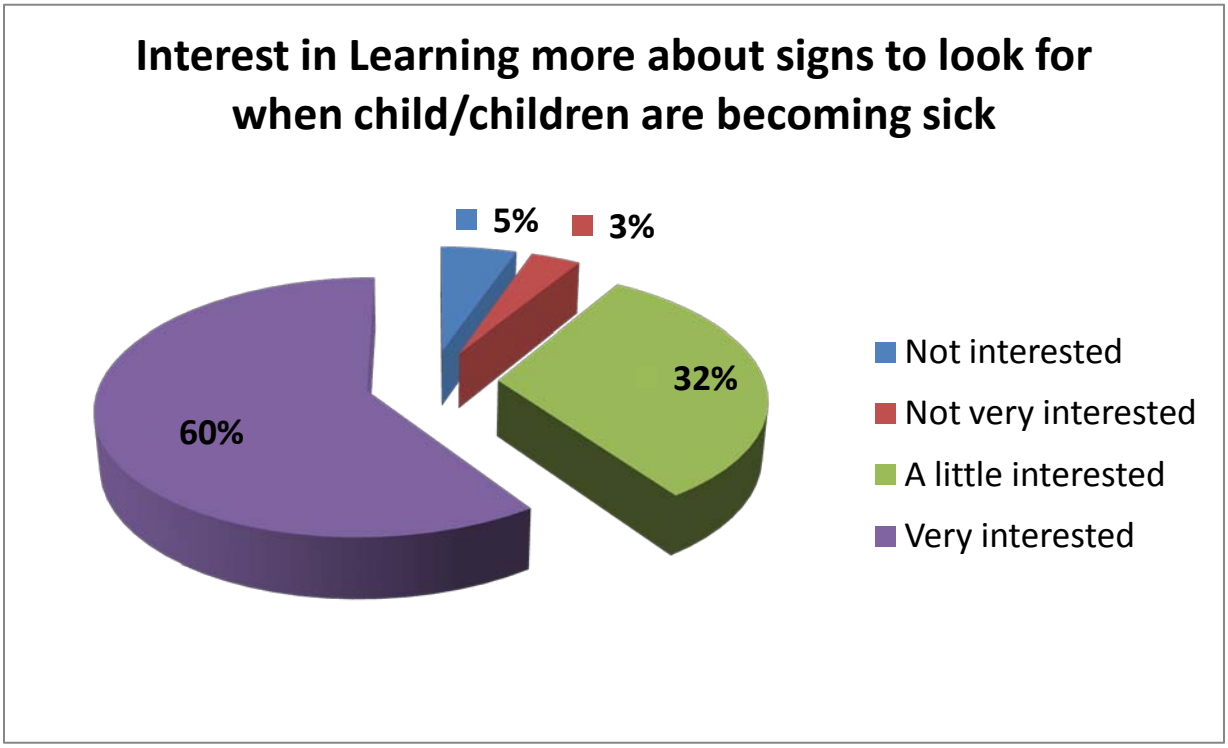

Figure 7: Responses to question regarding parents/guardians interest in learning more about what signs to look for when children are becoming sick

Discussion

The key findings of the needs assessments emphasized common themes and revealed discrepancies between qualitative and quantitative data. The initial key finding indicated that

92% of parents have health insurance, of which 65% have Medicaid. However, 17% of respondents stated that "lack of insurance" (Figure 6) was a difficulty they faced in receiving healthcare. This discrepancy may be the result of the participants misunderstanding the question or deficiencies in their insurance coverage. This question may need to be revisited and the discrepancy directly addressed.

The second key finding showed that parents were very interested in learning more about symptoms to look for when their children are sick and when they should go to the doctor. Although 70% of parents stated that they know when to take their children to the doctor, 60% were very interested in learning more about symptoms to look for when their child is becoming sick. These percentages revealed a discrepancy in the data; despite parents stating that they know when to take their child to the doctor, they still expressed interest in learning about when to take their child to the doctor. Providing interventions addressing these interests may lead to improved health outcomes for children at Sheltering Arms.

Lastly, teachers in key informant interviews and parents in the focus groups emphasized the lack of parental involvement in children's health and education as a major obstacle within the community. This finding could correlate with survey data indicating that most of the parents are single and do not receive support, see Figure 4.

Based on the key findings of the needs assessments and various factors affecting the community, statistical comparisons helped to quantify where the Sheltering Arms community stands with the rest of Georgia. According to the 2009 American Community Survey one-year estimate, the state percentage for single-parent households with children under 18 years of age was 11.3% compared to 62% of the assessed surveys (2009 American Community Survey, 2009). Regarding education level, the needs assessments data revealed 30% and 20% of residents

had either high school diplomas or college degrees, respectively (Figure 3). According to the US Census Bureau, the estimates were similar to the percentages, with data showing 28.9% and 17.9%, respectively. Furthermore, Table 3 disclosed 41% of caregivers had full-time jobs whereas 65.5% had full-time jobs according to the 2009 state estimate. Concerning health insurance, the 1-year estimate stated that 65% of the survey takers had Medicaid insurance coverage; another 10% and 15% had Peachcare and coverage through their occupations, respectively. In Figure 4, it is interesting to note that 8.3% were uninsured, which was lower than the state's estimate of 19.1% of residents without any coverage. In addition, the state estimated 25.9% of citizens had public health insurance and 64% had private health insurance. The former percentage is noticeably lower than the residents of the Sheltering Arms community, which reported more than 60% of caregivers as having some form of public health insurance [Figure 5].

The needs assessments imply some information about the health of the surrounding community and healthcare delivery in the neighborhoods surrounding Sheltering Arms. Several neighborhoods including Mechanicsville, Summer Hill, Pittsburgh, and Peoplestown offered healthcare facilities, libraries, and parks where children can develop physically and psychosocially. Specifically, the Peoplestown community had an established healthcare facility, Southside Medical Center. However, as an overall view of NPU-V, the lack of grocery stores and flourish of package/liquor stores impair the overall health of this neighborhood.

The health surveys and windshield surveys presented with certain limitations requiring a broader needs assessments. The survey would have benefited from doing a pilot run. A pilot of the survey would have identified questions that were too difficult to interpret, such as the open-ended question: "What are some things you would like to learn more about?" This question was too broad and did not provide significant data from survey-takers. Finally, additional needs

assessments would help clarify the discrepancies seen between the results from the focus groups/key informant interviews and the survey of parents. The first step in addressing these discrepancies would involve revisiting one of our greatest assets in the community, the parents and key-informants, to clarify any discrepancies that were uncovered.

Despite the limitations, certain strategies aimed at improving the health concerns identified by the Sheltering Arms community could be employed using the data generated through the needs assessments. The first key finding could be addressed through a system that assigns a pediatrician to every enrolled student at Sheltering Arms and requires an age-appropriate number of visits with this physician per year. This would enable the parent to form a long-term relationship with their child's pediatrician, while also ensuring that the child is receiving adequate healthcare attention during their developing years. The greatest obstacle would be funding for this project.

A multilevel teaching approach involving parents, Morehouse School of Medicine faculty, and the Sheltering Arms Newsletter to provide relevant health information could be an effective strategy to address concerns of the second, third and fourth key findings. Parents would attend a required pediatric preventive workshop before enrolling children in school. This would equip parents with the knowledge to identify symptoms of illness in their children. Additionally, the program would consist of monthly topics in an area such as asthma. A faculty member from Morehouse School of Medicine would speak with parents in an interactive workshop during Sheltering Arms monthly Parent Leadership Organization (PLO) meetings. Addressing the community's desire to receive more information on symptoms to be aware of when their child is becoming sick is the least difficult to implement among the strategies described. The key informant interviews and focus groups made it clear that the greatest obstacle Sheltering Arms

faced is maintaining involvement from parents in mandatory monthly PLO meetings. The multilevel teaching approach described may help overcome the participation barrier.

Several local resources available could aid in establishing programs. Sheltering Arms has a family room available to parents with computers, educational material, and meeting space. Adjacent to Sheltering Arms is the Dunbar Community Center that houses the Community Garden, the Center for Working Families, and the Center for Black Women's Wellness. Collectively, these centers support community members in promoting employment and the health and well-being of women through programs such as Askable Adults.

These health promotion strategies can be implemented as public policies to benefit the wider population. For example, required immunizations and the consistent utilization of primary care physicians instead of the Emergency Department would be more cost effective for parents, taxpayers, and hospitals. According to, "Impact of transmission dynamics on the cost effectiveness of rotavirus vaccination," in *Vaccine*, immunizations can save approximately $80 per diagnosed case of rotavirus (Shim & Galvani, 2009). Given this finding, one possible policy would require a local pediatrician to be assigned to every child enrolled in school with inadequate healthcare. In order to stay enrolled in school, the child must fulfill the age appropriate check-up requirements. This policy establishes an early relationship between physicians and families while reducing the number of patients seeking emergency care. These measures will decrease the overall healthcare cost and provide significant savings for the government.

Secondly, implementing a policy that requires parents to attend a preventive health education class at the beginning of the school year would be advantageous to the long-term health of children. School health officials in collaboration with local health professionals would

host this program, which will be convenient and accessible for parents. Additionally, parents would be encouraged to participate in monthly workshops focused on a health issue. This will lead to heightened awareness of health in the community and lower costs of care for families and the state government.

The needs assessments performed proved to portray the strengths and weaknesses of this community and the resources available. The community seemed very adamant about improving parental involvement and learning more about prevalent childhood symptoms. With more evaluation, an intervention can be employed that will parallel these key findings and help in strengthening the community.

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