Parental Awareness of Accidents Prevention Strategies towards the Physical Wellbeing of Preschool Children in Port Harcourt Metropolis, Rivers State

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Authors’ contributions

This work was carried out in collaboration between both authors. Author GAA designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Author RNA managed the analyses of the study. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJPR/2021/v5i130165

Editor(s):
(1) Dr. Emiliana Cristina Melo, Universidade Estadual do Norte do Paraná, Brazil.

Reviewers:
(1) Renata Evangelista Tavares Machado, Centro Universitário Governador Ozanam Coelho, Brazil.
(2) Omomule Taiwo Gabriel, Stellenbosch University, South Africa.

Complete Peer review History: http://www.sdiarticle4.com/review-history/64879

ABSTRACT

This study aimed at assessing parental awareness of accidents prevention strategies towards the physical wellbeing of preschool children in Port Harcourt metropolis, Rivers State. A quantitative survey design was used for the study. A non-proportionate stratified random sampling technique was used to select 600 respondents who were parents with children between the ages of 1-6 years old in Port Harcourt local government area. A simple random sampling technique was also used to select 6 towns that participated in the study. Data was collected through a questionnaire and then analyzed using the statistical package for social sciences. Respondents from the study were aware to a high extent that disallowing faulty balconies/rails where little preschoolers can prevent dangerous falls; living in houses with windows shield will protect preschoolers; disallowing faulty electrical outlets in the home can save preschoolers from accidents; and avoiding careless storage...
of sharp objects in the home can prevent cuts among preschoolers. They also showed high extent of awareness that teaching preschoolers the dangers of playing around fires; teaching parents the rudiments of safety for preschoolers; teaching preschoolers the dangers of playing with sharp objects, and teaching preschoolers the dangers of playing around pools can help prevent avoidable injuries. The result also showed high extent of awareness that avoiding wrong placing of kerosene stove or gas cylinders within the reach of preschoolers; avoiding smoking in the presence of children can reduce the risk of preschoolers attempting the act of smoking, and parents who are more careful in home arrangement and storage of objects can prevent accidents among preschoolers. This study therefore reveals adequate environmental consciousness by parents; adequate teaching on safety measures and effective behaviour management are significant strategies for home accident prevention among parents for the physical wellbeing of preschool children.

Keywords: Accidents; preschool children; physical wellbeing; strategy; prevention.

1. INTRODUCTION

Preschool is an early childhood stage in which children combine learning with play in the presence of adults. According to Baker [1], the preschool years (ages 2-1/2 to 5) are an exciting time for young children. When they were infants, they developed a trust of their caregivers. As toddlers, they began to establish some independence. Now, as preschoolers, they use this trust and independence to actively explore new forms of play (e.g., pretend play) and new environments (e.g., school) [2]. Preschool children are vulnerable to accidents at home and in schools because of their curiosity for explorations and their very limited ability to react quickly and properly in an emergency situation [3,4]. They are at high risk for many accidents such as burn and fall. Peden [5] reported that 65% of childhood in four low-income countries has experienced burn in and around home in and around home. He also stated that childhood injuries among pre-school children increase with age between one to five years.

Accidents can happen anywhere and at any time. The home is one place where domestic accidents frequently occur. No matter how much efforts are made for the domestic environment to be safe as possible, accidents at home can still happen even in the most conscientious of households [6]. When it comes to the health of families, especially for those with young children, it makes sense to know exactly what to do if these common scenarios do occur. Broides and Assaf [7] reported that home accidents for preschool children were mainly a result of poisoning, in addition to falls, choking, drowning, glass-related injuries, cuts and burns. Falls, however, are less fatal than other types of accidents. Accidents that pre-school children face may impair the physical wellbeing of pre-school children [8]. A child’s physical wellbeing if impaired can in turn affect the ability to actively engage, physically and mentally, in the intended and unintended learning opportunities during the most formative years. According to Allender and Spradley [9], disruption in continuous or full engagement with learning, resulting from injury or from chronic or communicable disease, can have a negative impact on the attainment of the breadth and complexity of skills necessary for school readiness.

Prevention of home accidents among pre-school children and ensuring their safety and freedom from dangerous home accidents is a task many parents are not aware of. Children feel safe and secure in their home, unfortunately the home is where many injuries and deaths occur [10]. Certain variables such as environmental consciousness, safety education and behavior management in the home can have enormous impact on preventing home accidents among preschool children. Inadequate environmental consciousness can create risks of accidents in the home where little children are found. Unsafe human practices in the home environments are actions that make the inhabitants in that environment vulnerable to avoidable accident. These practices include careless placements of sharp or harmful objects in any part of the home. For example, knives, matches, kerosene, gas cookers, hot water, hot oil or a cooking pot on fire can expose little children to dangers of accidents. Accidents are the largest single cause of death after the age of one year and are one of the most serious health problems facing the world today. They are the most common cause of hospital admission and can result in lifelong disability. All children are at risk of home injuries because of their normal curiosity, impulsiveness and desire
to master new skills and children imitate adult behavior from an early age [11,12]. Life cannot be risk free but utilizing household safety measures can prevent most household accidents.

Safety education is essential in determining peoples’ disposal to safe actions in the society. Parental education and training can affect knowledge of safety measures. It is another variable which may determine the prevention of accidents in the home environment. Safety measures include pro-active measures, and actions put in place in order to avoid the occurrence of harmful accidents in the home. Understanding what constitutes a harmful act is essential in analyzing the probable cause of an accident. Accidents in the home have been theorized to be caused by certain factors such as poor knowledge of preventive measures among older members of a household [13].

Children feel safe and secure in their homes, unfortunately the home is where many injuries and deaths occur. This resulted to an increase in the percentage of incapacitated children. Due to injuries sustained in the home, many of these children remain endangered. In recent times, many families even in the society have lost potential future leaders as a result of instant death or permanent deformity in children of this category due to home accidents. The physical wellbeing of young children is usually endangered by poor safety practices, poor safety knowledge, poor environmental consciousness and other circumstances, thereby denying the child active developmental milestone. Some of these ugly incidences could be as a result of lack of parental awareness of safety measures in the home. In the Port Harcourt metropolis, many children are subjected to avoidable risks which affect their physical wellbeing.

1.2 Problem Statement

Earlier studies have focused on causes of home accidents as well as preventive and safety measures that can reduce the occurrences of home accidents [8], thereby creating a gap in literature in the area of home accident prevention in preschool stage of child development. It is important to note that there is yet a gap in research on young children and home accidents, especially in developing countries like Nigeria, and Port Harcourt metropolis in particular. The paucity of data in the area of parental awareness on home accidents has had tremendous impact on home accident prevention. Many parents also may not know the impacts of some of their home practices that could subject young and mostly dependent children to great risks. More so, preschool children are usually curious and explorative; requiring special attention and skills in managing them. This act of curiosity has endangering effects on their lives and thus making the entire joy of the affected families to be short-lived. Understanding the safe practices of parents in the home can help understand how best to prevent home accidents among preschoolers. Thus, the focus of this paper is to investigate the variables that could influence the prevention of home accidents by parents in preschool stage of child development, while contributing to reliable data in the area of parental awareness.

2. MATERIALS AND METHODS

2.1 Design of the Study

This study was conducted in January-December, 2017 and adopted a quantitative survey design.

2.2 Area of the Study

The area of the study was Port Harcourt metropolis. Port Harcourt is the capital city of Rivers state and one of the fastest growing cities in Nigeria. The council area has an estimated population of over 500,000 [14]. Port Harcourt lies right in the Niger Delta region and thus its economy is primarily based on oil and the petroleum industry. The current state of urbanization and modernization in Port Harcourt are due to the associations it shares with the petroleum industry. Port Harcourt was the chief industrial city of the former eastern region. It also serves as the center of social and economic life in the Rivers State. It is a major industrial center with many multinational firms as well as other businesses from the petroleum industry operating from there. Port Harcourt is also the chief oil-refining city in Nigeria. The main export in the Rivers State is crude oil. Port Harcourt has two stadiums, two airports, two seaports and two refineries. The city is cosmopolitan in configuration, with several ethnic nationalities converging for greener pastures. Over 90 percent of the working population is engaged in the formal sector. Major institutions and corporations in the state are also located in the city. It lies along the Bonny River and is located in the Niger Delta. The reason for the choice of
area of the study is that as an industrial setting, many parents are engaged in many occupations which may deny them the attention their homes require. As result, many may opt for house-helps, thereby leaving the safety of the children at risk.

2.3 Population of the Study

The population of the study was all 2,003 parents who had children of 1-6 years old in the Port Harcourt local government area. According to the Port Harcourt Area Council Statistical Report [14], there were 2,003 parents with children between the ages of 1-6 years old in Port Harcourt local government area.

2.4 Sample and Sampling Technique

The study sample was 600 (240 fathers and 360 mothers) respondents selected from the 2,003 parents in Port Harcourt local government area. A non-proportionate stratified random sampling technique was used to select the sample for this study. This technique accorded unequal sample sizes to the selected towns. A simple random sampling technique was used to select 6 towns that participated in the study.

2.5 Instrument for Data Collection

A structured questionnaire sheet was developed by the researcher to collect data. The questionnaire is titled ‘Parental Awareness of Home Accident Prevention Strategies towards Physical Wellbeing of Preschool Children’ (PAHAPSPWPC). The PAHAPSPWPC has two (2) sections of A and B. The section ‘A’ contained information on the socio-demography of the respondents, while the section ‘B’ contained statements that addressed the research questions. The section ‘B’ contained 24 items which were designed on a 4 point scale of measurement of Very High Extent (VHE-4), High Extent (HE-3), Very Low Extent (VLE-2) and Low Extent (LE-1).

2.6 Validation of the Instrument

The instrument of the study was taken to lecturers in Home Economics Department of the Ignatius Ajuru University of Education, Rumuolumeni, who assessed the content in relation to the purpose and objectives of the study for validation. The validates were required to go through the purpose of the study, as well as the research questions and appraise the questionnaire items based on clarity of purpose, appropriateness of statements and made inputs where necessary. Corrections were made based on the inputs of the validates, and they reflected in the final draft of the questionnaire before it was administered.

2.7 Reliability of the Instrument

The questionnaire items were subjected to trial testing using some parents outside the study area who had similar characteristics. The subjects used for the trial testing were not allowed to take part in the main study. The responses were analyzed to determine the degree of internal consistency of the questionnaire items using Cronbach co-efficient alpha [15]. The reason for the use of this method is because it requires single administration of the instrument to establish internal consistency estimate of the items. According to Mat Daud et al. [16], alpha Cronbach's value above 0.6 is considered high reliability and acceptable index. Whereas, the value of Alpha Cronbach is less than 0.6 considered low. Alpha Cronbach values in the range of 0.60 - 0.80 are considered moderate, but acceptable. While Alpha Cronbach in the ranges of 0.8 and up to 1.00 is consider very good. Therefore, through this article the determination of Alpha Cronbach values on instruments developed is used to determine the degree of reliability of the instruments. The reliability test was positive at 0.82, 0.90, 0.83, 0.68, 0.83 and 0.93, respectively.

2.8 Method of Data Collection

The researcher used the direct contact approach in collecting the data from the parents. She trained three research assistant on the administration of the questionnaire, and research ethics.

2.9 Method of Data Analysis

Collected data were tabulated and analyzed using Statistical Packages for Social Scientists (SPSS). The obtained data were analyzed using mean tables and standard deviation. The 3 hypotheses were tested using t-test at 0.05 significant.

2.10 Decision Rule

The items on the instrument were structured according to the modified Likert scale on four
point rating scale [17]. On this scale, the average mean cut off is 2.50, in which case, an item is of low extent if it is 2.50 and below and of high extent if it is above 2.50.

3. RESULTS

Research Question 1: What is the extent of awareness of parents that adequate environmental consciousness is a strategy for home accident prevention for physical wellbeing of preschool children?

Table 1 shows the mean ratings and standard deviation of fathers and mothers’ responses on adequate environmental consciousness as a strategy for home accident prevention for physical wellbeing of preschool children. The data showed that items 2, 4, 5 and 7 were at high extent because they had grand mean scores of 2.50 and above, while items 1, 3 and 6 were at low extent because they had grand mean scores of less than 2.50. Also, the standard deviation ranged between 0.67 and 0.85 indicating that the respondents were not far from their opinions. The table also showed that the highest mean score was 4.00 which dwelt on ‘Living in houses with windows shield will protect preschoolers’ (item 4). The lowest mean score was 2.31 which dwelt on ‘allowing for a well-ventilated room for preschoolers can prevent suffocation (item 1).

Research Question 2: What is the extent of awareness of parents that adequate teaching on safety education is a strategy for home accident prevention for physical wellbeing of preschool children?

Table 2 shows the mean ratings and standard deviation of fathers and mothers’ responses on safety education as a strategy for home accident prevention for physical wellbeing of preschool children. The data showed that items 1-4 were at high extent because they had grand mean scores of 2.50 and above. Meanwhile, item 5 which dwelt on ‘adopting safety signs for preschoolers’ was at low extent because it had mean scores of less than 2.50. Also, the standard deviation ranged between 0.61 and 0.74 indicating that the respondents were not far from their opinions. The table also showed that the highest mean score was 3.53 which dwelt on ‘teaching preschoolers the dangers of playing around pools (item 4). The lowest mean score was 2.01 which dwelt on ‘adopting safety signs for preschoolers (item 5).

Table 1. Mean and standard deviation of parents’ responses on adequate environmental consciousness as a strategy for home accident prevention for physical wellbeing of preschool children

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>Fathers</th>
<th>Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{X}$</td>
<td>SD</td>
</tr>
<tr>
<td>1. Allowing for a well-ventilated room for preschoolers can prevent suffocation.</td>
<td>2.44</td>
<td>0.63</td>
</tr>
<tr>
<td>2. Disallowing faulty balconies/rails where preschoolers are can prevent dangerous falls</td>
<td>3.53</td>
<td>0.76</td>
</tr>
<tr>
<td>3. Adequate environment sanitation will reduce the risk of animal bites for preschoolers.</td>
<td>2.34</td>
<td>0.64</td>
</tr>
<tr>
<td>4. Living in houses with windows shield will protect preschoolers.</td>
<td>4.00</td>
<td>0.77</td>
</tr>
<tr>
<td>5. Disallowing faulty electrical outlets in the home can save preschoolers from accidents.</td>
<td>3.82</td>
<td>0.82</td>
</tr>
<tr>
<td>6. Preventing careless storage of large quantity of water in the home can save preschoolers from accidents.</td>
<td>2.44</td>
<td>0.58</td>
</tr>
<tr>
<td>7. Avoiding careless storage of sharp objects in the home can prevent cuts among preschoolers.</td>
<td>3.51</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Key: $\bar{X}$ = Mean score; SD = Standard Deviation
Research Question 3: What is the extent of awareness of parents that effective behaviour management is a strategy for home accident prevention for physical wellbeing of preschool children in Port Harcourt metropolis?

Table 3 shows the mean ratings and standard deviation of fathers and mothers’ responses on effective behaviour management as a strategy for home accident prevention for physical wellbeing of preschool children in Port Harcourt metropolis. The data showed that items 1, 5, 6, 8, 9, 10 and 12 were at high extent because they had grand mean scores of 2.50 and above. Items 2, 3, 4, 7 and 11 were at low extent because they had mean scores of less than 2.50. More so, the standard deviation ranged between 0.61 and 0.91 indicating that the respondents were not far from their opinions. The table also showed that the highest mean score was 4.00 which dwelt on ‘make sure that playground equipment is in good working order for preschoolers (item 5). The lowest mean score was 1.74 which dwelt on ‘Avoiding the storage of cleaning agents within the reach of preschoolers can prevent poisoning’ (item 3).

3.1 Hypotheses Testing

H$_{01}$: There is no significant (p>0.05) difference in the mean responses of fathers and mothers that adequate environmental consciousness is a strategy for home accident prevention for physical wellbeing of preschool children.

The result in Table 4 showed no significant (p>0.05) difference in the mean responses of fathers and mothers on adequate environmental consciousness as a strategy for home accident prevention for physical wellbeing of preschool children. The result above revealed that t-Crit value of 3.03≤t-Cal value of 1.65 at the same level of significance; thus H$_{01}$ was accepted.

H$_{02}$: There is no significant (p>0.05) difference in the mean responses of fathers and mothers that adequate teaching on safety measures is a strategy for home accident prevention for physical wellbeing of preschool children.

The result in Table 5 showed no significant (p>0.05) difference in the mean responses of fathers and mothers on adequate teaching on safety measures is a strategy for home accident prevention for physical wellbeing of preschool children. The result above revealed that t-Crit value of 3.43≤t-Cal value of 2.23 at the same level of significance; thus H$_{02}$ was accepted.

H$_{03}$: There is no significant (p>0.05) difference in the mean responses of fathers and mothers that effective behaviour management is a strategy for home accident prevention for physical wellbeing of preschool children in Port Harcourt metropolis.

The result in Table 6 showed no significant (p>0.05) difference in the mean responses of fathers and mothers on effective behaviour management as a strategy for home accident prevention for physical wellbeing of preschool children in Port Harcourt metropolis. The result above revealed that t-Crit value of 3.53≤t-Cal value of 2.34 at the same level of significance; thus H$_{03}$ was accepted.

Table 2. Mean and standard deviation of parents’ responses on teaching on safety education as a strategy for home accident prevention for physical wellbeing of preschool children

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>Fathers</th>
<th>Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{X}$</td>
<td>SD</td>
</tr>
<tr>
<td>1. Teaching preschoolers the dangers of playing around fires.</td>
<td>2.64</td>
<td>0.64</td>
</tr>
<tr>
<td>2. Teaching parents the rudiments of safety for preschoolers.</td>
<td>2.51</td>
<td>0.67</td>
</tr>
<tr>
<td>3. Teaching preschoolers the dangers of playing with sharp objects.</td>
<td>2.64</td>
<td>0.72</td>
</tr>
<tr>
<td>4. Teaching preschoolers the dangers of playing around pools</td>
<td>3.53</td>
<td>0.70</td>
</tr>
<tr>
<td>5. Adopting safety signs for preschoolers.</td>
<td>2.12</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Key: $\bar{X}$ = Mean score; SD = Standard Deviation
Table 3. Mean and standard deviation of parents' responses on effective behaviour management as a strategy for home accident prevention for physical wellbeing of preschool children in Port Harcourt metropolis

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>Fathers Mean</th>
<th>Fathers SD</th>
<th>Fathers RMK</th>
<th>Mothers Mean</th>
<th>Mothers SD</th>
<th>Mothers RMK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Avoiding wrong placing of kerosene stove or gas cylinders within the reach of preschoolers</td>
<td>3.33</td>
<td>0.88</td>
<td>High extent</td>
<td>3.30</td>
<td>0.91</td>
<td>High extent</td>
</tr>
<tr>
<td>2. Avoiding use of oven in the presence of preschoolers can save them from burns</td>
<td>2.23</td>
<td>0.62</td>
<td>Less extent</td>
<td>2.21</td>
<td>0.66</td>
<td>Less extent</td>
</tr>
<tr>
<td>3. Avoiding the storage of cleaning agents within the reach of preschoolers can prevent poisoning.</td>
<td>1.74</td>
<td>0.53</td>
<td>Less extent</td>
<td>2.31</td>
<td>0.67</td>
<td>Less extent</td>
</tr>
<tr>
<td>4. Avoiding the storage of medications within the reach of preschoolers can save them drug abuse.</td>
<td>2.33</td>
<td>0.59</td>
<td>Less extent</td>
<td>2.42</td>
<td>0.64</td>
<td>Less extent</td>
</tr>
<tr>
<td>5. Make sure that playground equipment is in good working order for preschoolers.</td>
<td>4.00</td>
<td>0.69</td>
<td>High extent</td>
<td>3.91</td>
<td>0.73</td>
<td>High extent</td>
</tr>
<tr>
<td>6. Avoiding smoking in the presence of children can reduce the risk of preschoolers attempting the act of smoking.</td>
<td>3.33</td>
<td>0.79</td>
<td>High extent</td>
<td>3.01</td>
<td>0.83</td>
<td>High extent</td>
</tr>
<tr>
<td>7. Parents who are cautious with the usage of phones and other gadgets even at home can save the lives of preschoolers.</td>
<td>2.09</td>
<td>0.61</td>
<td>Less extent</td>
<td>2.45</td>
<td>0.62</td>
<td>Less extent</td>
</tr>
<tr>
<td>8. Parents who are more careful in home arrangement and storage of objects can prevent accidents among preschool preschoolers.</td>
<td>3.02</td>
<td>0.83</td>
<td>High extent</td>
<td>2.92</td>
<td>0.78</td>
<td>High extent</td>
</tr>
<tr>
<td>9. Parents must not fight in the presence of preschoolers to avoid subjecting them to harmful injuries.</td>
<td>2.64</td>
<td>0.68</td>
<td>High extent</td>
<td>3.02</td>
<td>0.74</td>
<td>High extent</td>
</tr>
<tr>
<td>10. Parents who are clean can make the home safe for preschoolers.</td>
<td>3.30</td>
<td>0.78</td>
<td>High extent</td>
<td>3.44</td>
<td>0.84</td>
<td>High extent</td>
</tr>
<tr>
<td>11. Effective parental stress management can help parents pay attention to their preschoolers against dangers in the home.</td>
<td>2.04</td>
<td>0.58</td>
<td>Less extent</td>
<td>2.00</td>
<td>0.61</td>
<td>Less extent</td>
</tr>
<tr>
<td>12. Reduction in dependence on house-helps can help save the errors of house-helps on home accidents.</td>
<td>2.64</td>
<td>0.66</td>
<td>High extent</td>
<td>2.50</td>
<td>0.62</td>
<td>High extent</td>
</tr>
</tbody>
</table>

Key: $\overline{X}$ = Mean score; SD = Standard Deviation

Table 4. T-test analysis of the mean responses of fathers and mothers that adequate environmental consciousness is a strategy for home accident prevention for physical wellbeing of preschool children

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>$\overline{X}$</th>
<th>SD</th>
<th>P-value</th>
<th>DF</th>
<th>t-Cal</th>
<th>t-Crit</th>
<th>RMK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathers</td>
<td>236</td>
<td>3.22</td>
<td>0.61</td>
<td>0.03</td>
<td>579</td>
<td>1.65</td>
<td>3.03</td>
<td>HA</td>
</tr>
<tr>
<td>Mothers</td>
<td>345</td>
<td>3.03</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The findings of this study revealed the extent of awareness of parents that adequate environmental consciousness is a strategy for home accident prevention for physical wellbeing of preschool children. The result showed that items 2, 4, 5 and 7 on Table 1 were at high extent because they had grand mean scores of 2.50 and above. These items are: ‘disallowing faulty balconies/rails where little preschoolers are can prevent dangerous falls; living in houses with windows shield will protect preschoolers; disallowing faulty electrical outlets in the home can save preschoolers from accidents; and avoiding careless storage of sharp objects in the home can prevent cuts among preschoolers. These results are in agreement with Hogg [17] who opined that environmental consciousness is a key to the prevention of home accidents; though Ibrahim [18] in his study on childhood accidents in Egypt argued that many parents do not have knowledge to some of these safety precautions.

On the other hand, items 1, 3 and 6 on Table 1 were at low extent because they had grand mean scores of less than 2.50. These items are: ‘allowing for a well-ventilated room for preschoolers can prevent suffocation; adequate environment sanitation will reduce the risk of animal bites for preschoolers; and preventing careless storage of large quantity of water in the home can save preschoolers from accidents. These results could be a confirmation of Ibrahim [18] argument on knowledge on minor and major precautionary techniques on home accidents prevention among little children. By manipulating the home environments, parents can make the home a safer place for their children [19,20].

Roberts and Brooks [21] posit that each child needs an experientially rich environment, a home in which the child gets opportunity to play with varieties of objects, is perhaps the richest home as far as the young child is concerned. With a safe home for children, risks of severe harm can be highly minimized. It is important to note that environments are never neutral in their impact on children. Tobi [22] also added that if the outside and inside of a home is clean, attractive, and free from dangerous materials, plants, trees, among others, then children can feel safe from harm. The finding on safety needs shows that parents perceived all the items enumerated should be provided outside the house i.e. at the outdoor areas. Typical items outside the house are the plants, trees, garden, play areas, swimming pool, garage, swing, fence, among others. Clean environment outside the house is a necessity for children's play and health.

The study also revealed the extent of parents’ awareness on teaching on safety education as a strategy for home accident prevention for physical wellbeing of preschool children. The data showed that items 1-4 on Table 2 were at high extent because they had grand mean scores of 2.50 and above. These include: ‘teaching preschoolers the dangers of playing around fires; teaching parents the rudiments of safety for preschoolers; teaching preschoolers the dangers of playing with sharp objects, and teaching preschoolers the dangers of playing around pools. These findings are in agreements with Ashmore and Brodzinsky [23] who noted that parents must have safety education – whether formal or informal – in order to be able to prepare their children for task of safety practices. Bradley [19] and Hitchcock [20] noted that many parents who lack knowledge of safety

4. DISCUSSIONS OF FINDINGS

Table 5. T-test analysis of the mean responses of fathers and mothers that adequate teaching on safety measures is a strategy for home accident prevention for physical wellbeing of preschool children

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>SD</th>
<th>P-value</th>
<th>DF</th>
<th>t-Cal</th>
<th>t-Crit</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathers</td>
<td>236</td>
<td>3.22</td>
<td>0.78</td>
<td>0.05</td>
<td>579</td>
<td>2.23</td>
<td>3.43</td>
<td>HA</td>
</tr>
<tr>
<td>Mothers</td>
<td>345</td>
<td>2.94</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6. T-test analysis of the mean responses of fathers and mothers that effective behaviour management is a strategy for home accident prevention for physical wellbeing of preschool children in port harcourt metropolis

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>SD</th>
<th>P-value</th>
<th>DF</th>
<th>t-Cal</th>
<th>t-Crit</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathers</td>
<td>236</td>
<td>2.62</td>
<td>0.74</td>
<td>0.04</td>
<td>579</td>
<td>2.34</td>
<td>3.53</td>
<td>HA</td>
</tr>
<tr>
<td>Mothers</td>
<td>345</td>
<td>3.42</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

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measures in the home subject their children to dangerous accidents in the home. Item 5 on Table 2 which dwelt on ‘adopting safety signs for preschoolers’ was at low extent because it had mean scores of less than 2.50. This finding could be due to inability of some parents to know and utilize these signs. Parental knowledge and levels of education may affect prevention of home accidents. Harris [24] noted that in prevention of home accidents, understanding the need for consciousness and safety measures is essential. Bradley [19] noted that parents have to be extra vigilant during circumstances that increase the likelihood of accidents in the child; such circumstances include hunger/fatigue, illness/stress and change in care-giver. To minimize the risk, he recommended formal and informal education.

Finally, the study revealed the extent of parents’ awareness on effective behaviour management as a strategy for home accident prevention for physical wellbeing of preschool children. The data showed that items 1, 5, 6, 8, 9, 10 and 12 on Table 3 were at high extent because they had grand mean scores of 2.50 and above. These include: avoiding wrong placing of kerosene stove or gas cylinders within the reach of preschoolers; avoidance in smoking in the presence of children can reduce the risk of preschoolers attempting the act of smoking, and parents who are more careful in home arrangement and storage of objects can prevent accidents among preschool preschoolers. Others include: parents must not fight in the presence of preschoolers to avoid subjecting them to harmful injuries; parents who are clean can make the home safer for preschoolers, and reduction in dependence on house-helps can help save the errors of house-helps on home accidents. These findings are in agreement with the study of Ibrahim [18] who reported that some parents know certain basics of safety before their children which include not carrying out harmful practices and or activities before them. To support these findings, Gling [25] noted that parents’ lifestyle habits can take a toll on their child’s health. Constant tiffs with a partner may dent the child’s confidence and his outlook towards events and things around him.

On the other hand, items 2, 3, 4, 7 and 11 on Table 3 were at low extent because they had mean scores of less than 2.50, these include: avoiding the storage of cleaning agents within the reach of preschoolers can prevent poisoning; avoiding the storage of medications within the reach of preschoolers can save them drug abuse; parents who are cautious with the usage of phones and other gadgets even at home can save the lives of preschoolers from avoidable accidents, and effective parental stress management can help parents pay attention to their preschoolers against dangers in the home. Ibrahim [18] supported these findings when he noted that many parents are naturally careless, and do not have adequate education to enable them understand the risks in certain behaviors at home. Gling [25] also opined that negative parent behaviors such as addiction to phones, carelessness and child neglect can be detrimental to a child’s development and behavior, as well as safety. Children who are victims of bad parenting are two times more likely to misbehave in front of others. The bad habits of parents such as drinking, smoking and lying can grossly affect the physical and mental health of children. A child’s behavior is often a reflection of his parents and the treatment meted out to him at home. Parents are role models for their children. It is from them that children adopt certain values and life skills. Children also learn how to express emotions and deal with problems of life from their parents.

5. CONCLUSION

This study has revealed that parents have a great role to play in ensuring the safety of their children at home. The result from this study has also shown that parents in Port Harcourt metropolis, Rivers state have a high extent of awareness that that disallowing faulty balconies/rails where little preschoolers are can prevent dangerous falls; living in houses with windows shield will protect preschoolers; disallowing faulty electrical outlets in the home can save preschoolers from accidents; and avoiding careless storage of sharp objects in the home can prevent cuts among preschoolers. They also showed high extent of awareness that teaching preschoolers the dangers of playing around fires; teaching parents the rudiments of safety for preschoolers; teaching preschoolers the dangers of playing with sharp objects, and teaching preschoolers the dangers of playing around pools can help prevent avoidable injuries. The result also showed high extent of awareness that avoiding wrong placing of kerosene stove or gas cylinders within the reach of preschoolers; avoiding smoking in the presence of children can reduce the risk of preschoolers attempting the act of smoking, and parents who are more careful in home arrangement and storage of objects can prevent accidents among children.
preschoolers. There was no significant difference in the mean responses of fathers and mothers that adequate teaching on safety measures, environmental consciousness and effective behaviour management are strategies for home accident prevention for physical wellbeing of preschool children.

6. RECOMMENDATIONS

Based on the findings of this study the following recommendations are made basically on home safety education for religious organizations, civil society organizations, women groups, and governments to be effectively involved in education and enlightenment programmes on the following:

1. Parents should be made to understand the need for environmental consciousness to prevent avoidable accidents in the home.
2. Parents should be positively sensitized on effective teaching techniques to help their offspring avoid dangerous accidents.
3. Emphases should be placed on behaviour management of parents to avoid child accidents in the home.

CONSENT

As per international standard or university standard, respondents’ written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sdiarticle4.com/review-history/64879