Parents’ Perceptions of Pre-school Lunch Boxes in Nelson Mandela Bay

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This abstract is a summative analysis of the qualitative data gathered during a field survey based on the interviews from five different ECD centers in Nelson Mandela Bay (NMB) collected from parents and guardians who sent their children to these centers. Notably, the interviews were open-ended questions aimed at allowing an interactive session for participants to give as brief or lengthy answer as they wanted to explain their perceptions about the preschool lunchboxes. The abstract has identified a series of patterns that are problematic within the ECD centers sampled, which may be used to make general conclusions across ECD centers in lower-class and middle-class regions of NMB metropolis. The findings show that a majority of parents are likely to pack food for their children only because they can afford it, the child likes it, it’s a school requirement or they have little time to pack anything else, and not because it is the healthy choice for the child. Additionally, a lot of parents are likely to be ignorant of what a healthy food is, while they can easily tell what a healthy child should look like. Lastly, while parents are aware of that their children eat at school, a large number of them lack any clue as to what food the school provides and whether it is healthy. Ensuring that children grow and develop well through nutrition would therefore require increasing awareness among the parents with respect to the value of food provided in children’s lunchboxes.

Keywords: Early childhood development center; Malnutrition; Focus group discussions; Lunch boxes; Parent programs

Introduction

Children establish their dietary behavior during childhood [1]. During the preschool years, parents retain the main responsibility of developing the preferences of foods for their children based on food availability, accessibility, modeling and exposure [2]. The nutrition knowledge as well as attitudes of parents towards specific foods influences what they pack in the lunchboxes of their children. Additionally, there are several barriers such as foods, preparation time involved, cultural issues and insufficient knowledge that hinder healthy eating habits among the preschool children [3].

Objectives

The research aims at describing and exploring parents’ perceptions of pre-school children's lunch boxes.

To realize the above aim, the research will be guided by the following objectives:

• To describe and explore the perceptions of parents’ about lunch boxes.
• To make recommendations for an appropriate nutrition program to improve lunch box content for pre-school children in NMB.

Material and Methods

This report is a summative analysis of the qualitative data gathered during a field survey based on the focus groups from five different ECD centers collected from parents and guardians who sent their children to these centers. This descriptive, explorative survey adopted a qualitative approach. The study participants were purposively selected from ECD centers in Nelson Mandela Bay metropolis where parents supply lunch boxes to their children and data was collected through focus group discussions (FGDs) with the parents. The study invited a total of 25 participants from 5 preschools namely Ekhayeni preschool-New Brighton, Ikamvaletu Christian Daycare- Motherwell, Amazing kids- Motherwell, Kamvaletu- Kwazakele and Ibhongolethu Educare Centre- Motherwell. The participants were nominated purposively by the participating preschool principals to incorporate an adequate mix of socio, cultural and economic backgrounds. In the study area, 3% of the parents’ populations have no schooling, 75% have grade 12 or lower and 13% have basic primary school level of education [4]. Some of the factors contributing to the low levels of education in the study population could be poverty and social challenges.

The inclusion criterion for the participants was:

• Parents whose children carry lunch boxes to the selected schools.
• Adult parents aged 18 years and above.

With respect to the sampling procedure for the study participants, the researcher adopted nominations by asking neutral stakeholders for names. The neutral parties in this survey were the principals and practitioners of the preschools where the parents supply lunch boxes. The first step involved informing the neutral parties in each of the preschools of the inclusion criteria for the study participants and asking them for 10 names that incorporates adequate mix of socio, cultural and economic backgrounds. The researcher then randomly selected 5 names from the list of nominees from each school for a total of 25 participants who were formally invited into the focus groups. When asking for the names, the researcher ensured to describe the purpose of the research and how it may benefit the community and the participants. The researcher also requested the nominators that their names are mentioned in the invitation texts to the participants for the
focus groups. This was meant to improve clarity while informing the participants of who recommended them to the study and that the recommenders thought they could provide insightful views on the topic.

Data collection procedure and research instrument

Research instruments are measurement tools that are used in data collection [5]. In light of the qualitative research approach adopted in the study, five Focus Group Discussion (FGD) will be used in collecting the study data. The focus group questions are designed to create a probing environment where the participants feel more comfortable in sharing their views with the researcher [5]. In addition, they allow follow-up questions that help researchers to delve into discussions of interest to the participants. To help carry out the FGs in the local language (Xhosa), the researcher employed one moderator and one field worker to assist with note taking during the group sessions. The field worker also helped by indicating which participant is talking for accurate reporting on the results. On the other hand, the moderator asked broader questions in order to generate discussions and elicit responses from the perspective of the participants. The goal of the moderator was to generate maximum amount of opinions and discussions within the specified time. To realize this goal, the moderator asked open ended questions using focus group discussion guide to allow expression of the views of the respondents and allow independent conversations.

The moderator also informed the participants that this is a platform for learning from each other and that there is no attempt to reach census rather the discussions are meant to gather information. The numbers of questions were kept reasonable (less than 10) simple and short to prevent confusion from long discussions. Before the discussions, the moderator had a pre-briefing session with the participants. The discussion was in the native language of the respondents, and their responses were recorded and transcribed then translated into English with the total words for the English transcripts spanning 25,000 words of text. To make sense of it, the text was condensed, coded and analyzed by the researcher based on the questions asked.

Results

The study examined the participants based on seven key questions as follows:

- Can you explain what you packed in your child’s lunch box yesterday and today?
- Why you packed what you mentioned in question one for your child?
- How would you identify healthy food in a child’s lunch box?
- Why should children get healthy food?
- How do you identify a healthy child?
- Does your child get breakfast and lunch here at creche?
- Do you know what kind of food they eat here at school?

Taking each question to be represented by its number in the list, the questions can be coded as Q1 to Q7. Some of the responses to these questions were similar among participants within the same group and the entire sample, while some were different for all participants.

<table>
<thead>
<tr>
<th>Item</th>
<th>Amazing Kids ECD</th>
<th>Ibhongolethu ECD</th>
<th>Ikamvaletu ECD</th>
<th>Kamvelihle ECD</th>
<th>Masilakhe ECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Yoghurt, banana, apple, cheese, brown bread with butter, juice, drink-o-pop, nīk-nacks</td>
<td>Brown bread with eggs, cheese, butter or rama, apple, pear, banana, spaghetti with pithchard, umphokoqo with maas</td>
<td>Pear, apple, banana, shibobo biscuits, yoghurt, drink-o-pop</td>
<td>Banana, glucose chips, polony and rama, Noodles, vanilla, yoghurt, meat, bread, biscuits</td>
<td>Banana, orange, yoghurt, juice, formula</td>
</tr>
<tr>
<td>Q2</td>
<td>It boosts immune system, he likes it</td>
<td>It’s easier for him to eat, it’s easiest to prepare, he likes it, it’s rich in protein, they cook at school so it’s just snack</td>
<td>Fruit is healthy, cleans their system, gives them strength</td>
<td>Easiest to prep, he likes it</td>
<td>It’s a school requirement, he likes banana, they have more food at school, parents like it</td>
</tr>
<tr>
<td>Q3</td>
<td>Bread needs to have butter, needs eggs, needs veg</td>
<td>Needs to have fruit, low fat, starch, and healthy drinks</td>
<td>Must be in clean box, non-fatty, have vegetables, fruits, and whole foods, Not overcooking it, not cooked on aluminium, no additives (sugar, spices, excess oil)</td>
<td>It needs to have fruits, yoghurt, peanut butter, fruits, drinks, veg</td>
<td>Must be clean food in clean container, Needs to include fruit, veg, water and dairy, needs to be fresh from market, We know but we can’t afford it</td>
</tr>
<tr>
<td>Q4</td>
<td>It prevents sickness, increases their concentration, boost their immunity, prevent constipation, it provides nutrients like calcium, its recommended in clinics</td>
<td>It should be good for bones, have vitamin C, D, proteins, and nutrients and water</td>
<td>prevent sickness, provide energy, increase brain function, alertness</td>
<td>To boost their immune system, help development, give strength, good eyesight, sharp brains</td>
<td>Promotes development, weight increase, appetite, fair skin</td>
</tr>
<tr>
<td>Q5</td>
<td>Must be always active, energetic, rarely get sick, have good memory</td>
<td>To prevent vomit, increase brain development, reduce allergy, help blood, help bone development</td>
<td>Loves people, doesn’t become sick, normal physical, mental, social, and spiritual development</td>
<td>Jumpy, loud, energetic, normal weight, no diarrhea, alert, not obese, not hyperactive</td>
<td>Jumpy, speaking like other children, not hyperactive, white teeth, no skin rash</td>
</tr>
<tr>
<td>Q6</td>
<td>Yes, but they eat at home and only eat lunch in school</td>
<td>Mixed answers of yes and not sure</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
balanced with fruits, starches, proteins and water, as well as packed so because of nutritional value and this poses a major problem to the kids as it shows parents have not prioritized nutrition as the basis for packing their children's food.

Notably as well, about how healthy food looks like, most parents did not have a definitive answer and gave one phrase such as "should be in a clean container", "should be clean food", "should be not too oily." While these are fundamental requirements, they are only part of the details. Indeed, only one parent gave a comprehensive answer about what a healthy food should look like, including being clean, fresh, balanced with fruits, starches, proteins and water, as well as packed hygienically. This is also a problem that shows the lack of awareness amongst parents.

In regards to the why children should get healthy food, most parents were well informed on the benefits of eating healthy, and a majority mentioned normal child development. One parent went further to define physical, mental, spiritual and social development, which is ironical because most parents could not identify what a healthy food is but they understand what it does in a child.

When asked about whether they were aware if their child eats at school, the parents admitted that the school provided both breakfast and lunch. The follow-up question to this was about if the parents knew what foods their children ate at school. Nearly all of the parents knew what their children ate for breakfast, mostly because they saw it at one point when they brought the child to creche. On the other hand, only half of the parents could mention any food whatsoever that their child ate for lunch. In fact, again only two parents mentioned what the meals were for their children.

Generally, pediatric dietary guidelines encourage diverse, whole unprocessed foods for children to processed foods and added sugars [6]. The current survey findings indicate a poor eating habit with a possibility of emerging overweight and malnutrition related conditions such as stunting in the population. And the research recommends that pediatric guidelines that may help limit carbohydrates intake hence a good treatment for overweight, obesity and insulin resistance in children. However, this should only be implemented under the guidance of a qualified dietitian. To help the public in making healthy food choices for children, The Child and Adult Care Food Program (CACFP) recommends that children are fed on milk and milk products, vegetables, fruits, meat and meat alternatives and grain components [7]. This builds on the detailed recommendations by the United States Agriculture Department (USDA) and the Department of Human Services and Health (DHHS) that recommends children to be fed on variety of nutrient-dense diet such as plenty of whole grains, fruits, vegetables and saturated fats. Balancing the healthy foods with moderate physical activity in children is highly recommended by DHHS as key to building a healthy body mass index besides reaching and maintaining a healthy weight. Further USDA, CACFP and DHHS recommend the use of sugars in moderation on the diets of preschool children. The Healthy Eating Plate (HEP) that was created by experts from Harvard School of Public Health attempt to address the deficiencies on the USDA guideline by highlighting portion sizes in the meals. For instance, vegetables and fruits to form half the plate, whole grains contribute quarter of the plate, and proteins also quarter of the plate [8]. In addition, the HEP encourages the consumption of healthy plant oils in moderation drinking more fluids such as water and staying active. A major disadvantage of the HEP is that it promotes the use of healthy oils without setting maximum percentages/portions for the children by the sources of fat. To help parents and the public make healthy eating decisions for their children, it is imperative that the institutions that publish PFBDGs improve on the simplicity, prominence and uniformity of the guidelines.

Most ECD centers in South Africa either allow lunchboxes from home; provide their own meals or a combination of both. Either way, the quality of food served to children fall short of micronutrient and energy density contrary to the Recommended Daily Allowance (RDA) of children [9]. ECD centers that work for four to seven hours daily should provide 50 to 66% of the daily nutritional requirements of a child. Further, an ECD that operates for more than 8 hours a day should provide 50 to 66% of the daily nutritional requirements of a child. The foods served should also be in their correct quantities and in accordance with the pediatric dietary guidelines. However, a survey conducted in Texas on the food intake at several ECD highlighted the lack of zinc, iron, and energy in the diets of children [10]. Another study conducted in five four ECD centers in underprivileged communities of Guatemala, where children spent 8 hours a day indicated that they were served between one meal to three meals a day [11]. The nutrient contribution of the meals, fruits and vegetables were rarely served implying that the children may not be getting sufficient vitamins and minerals for proper growth. Australian children that attend 8 hours of day care are served nutrient-rich breakfast and lunch with two snacks that are often sweet biscuits or chocolate bars [12]. The SA Pediatric Food-Based Dietary Guidelines recommends that children are provided with sufficient macro and micro nutrients in meals that support optimal development and growth. This excludes most commercial snacks, sweet foods, chocolate bars and biscuits. Providing children with a variety of nutrient dense foods within the ECD centers encourages an establishment of healthy eating habits as well as continued contribution to their growth and development.

Table 1: Questions asked to the participants based on seven key questions for examination.

<table>
<thead>
<tr>
<th>Q7</th>
<th>Oat and maize porridge for breakfast and umphokoqo, noodles, pilchard, chicken, livers, pilchard, umga rice, macaroni for lunch on different days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3</td>
<td>Jams and morvite porridge for breakfast, rice and meat Monday, spaghetti and pilchard, Tuesday, umphokoqo on Friday its minced meat and stiff papa</td>
</tr>
<tr>
<td>Q4</td>
<td>Mabele porridge for breakfast, and lunch is samp with beans, umphokoqo, spaghetti with pilchard, rice, chicken, liver and the fruits we pack</td>
</tr>
<tr>
<td>Q5</td>
<td>Jam or oats porridge for breakfast and lunch it's spaghetti sometimes</td>
</tr>
<tr>
<td>Q6</td>
<td>Jam porridge for breakfast, and lunch it's rice veg, samp with beans, spaghetti, umphokoqo with maas and morvite with milk</td>
</tr>
</tbody>
</table>

Discussion

From the Table 1, the most common food parents pack for their children include fruits, yoghurt, bread and juice. Upon further inquiry, it was noted that some ECD centers insist that parents pack yoghurt at least twice a week and fruits daily. When asked why they packed what they did, parents mostly said that they were either following the school requirement or it was the food they could afford. About half of the participants also said they packed what their children liked or what took the shortest time to pack. Only five of the parents noted that they packed so because of nutritional value and this poses a major problem to the kids as it shows parents have not prioritized nutrition as the basis for packing their children's food.

In regards to the why children should get healthy food, most parents were well informed on the benefits of eating healthy, and a majority mentioned normal child development. One parent went further to define physical, mental, spiritual and social development, which is ironical because most parents could not identify what a healthy food is but they understand what it does in a child.

When asked about whether they were aware if their child eats at school, the parents admitted that the school provided both breakfast and lunch. The follow-up question to this was about if the parents knew what foods their children ate at school. Nearly all of the parents knew what their children ate for breakfast, mostly because they saw it at one point when they brought the child to creche. On the other hand, only half of the parents could mention any food whatsoever that their child ate for lunch. In fact, again only two parents mentioned what the meals were for their children.

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Most ECD centers in South Africa either allow lunchboxes from home; provide their own meals or a combination of both. Either way, the quality of food served to children fall short of micronutrient and energy density contrary to the Recommended Daily Allowance (RDA) of children [9]. ECD centers that work for four to seven hours daily should provide 33.3% of the daily nutritional needs of preschool children. Further, an ECD that operates for more than 8 hours a day should provide 50 to 66% of the daily nutritional requirements of a child. The foods served should also be in their correct quantities and in accordance with the pediatric dietary guidelines. However, a survey conducted in Texas on the food intake at several ECD highlighted the lack of zinc, iron, and energy in the diets of children [10]. Another study conducted in five four ECD centers in underprivileged communities of Guatemala, where children spent 8 hours a day indicated that they were served between one meal to three meals a day [11]. The nutrient contribution of the meals, fruits and vegetables were rarely served implying that the children may not be getting sufficient vitamins and minerals for proper growth. Australian children that attend 8 hours of day care are served nutrient-rich breakfast and lunch with two snacks that are often sweet biscuits or chocolate bars [12]. The SA Pediatric Food-Based Dietary Guidelines recommends that children are provided with sufficient macro and micro nutrients in meals that support optimal development and growth. This excludes most commercial snacks, sweet foods, chocolate bars and biscuits. Providing children with a variety of nutrient dense foods within the ECD centers encourages an establishment of healthy eating habits as well as continued contribution to their growth and development.
Conclusion

In conclusion, this report has identified a series of patterns that are problematic within the ECD centers sampled, which may be used to make general conclusions across ECD centers in lower-class and middle-class regions of NMB metropolis. Firstly, a majority of parents are likely to pack food for their children only because they can afford it, the child likes it, it's a school requirement or they have little time to pack anything else, and not because it is the healthy choice for the child. Additionally, a lot of parents are likely to be ignorant of what a healthy food is, while they can easily tell what a healthy child should look like. Lastly, while parents are aware of that their children eat at school, a large number of them lack any clue as to what food the school provides and whether it is healthy.

Recommendations

From the findings above, the study provides the following recommendations:

- That nutrition intervention program should be implemented targeting the needs of specific individuals and that blanket supplementation programs to impact underweight may result in further weight gain in the population.
- Of more importance is also the fact that urgent preventative strategies are needed to investigate the potential contribution that caregivers can make to prevent malnutrition in the population.
- Maintenance of behavior change about the preschool lunchboxes should be spear head in the form of key messages on the lunch box, labels, calendars, and simple education materials.
- Knowledge, attitudes and practices of caregivers should be monitored prior to and post any intervention to determine the impact of the intervention.

The content of any intervention program should be developed through participatory approaches to ensure adequate buy-in from the caregivers.

References