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INFLUENCE OF FOOD COPING STRATEGIES ON PERFORMANCE OF PARENTAL ROLES IN VULNERABLE HOUSEHOLDS FACING FOOD INSECURITY IN NAKURU TOWN WEST SUB COUNTY, KENYA

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Abstract: Food insecurity remains a critical issue affecting vulnerable households across the globe, particularly those with financial constraints characterized by low incomes and unemployment. Vulnerable households employ several coping strategies that they use to navigate the challenges of food scarcity. This paper discusses the food coping strategies used by vulnerable households in Nakuru Town West Sub County to address food insecurity. The paper specifically probes how these coping strategies influence the performance of their parenting roles. The paper finally provides recommendations on how food coping strategies can be fostered to become sustainable while addressing the root causes of food insecurity.

Keywords: Food Coping Strategies, Food Insecurity, Vulnerable Households.

I. INTRODUCTION

As cities in Sub-Saharan Africa grow, the expansion will mean that more food must be transported to these urban areas to feed the growing populations. This reality puts a strain on the already inadequate infrastructure from rural to urban areas, providing another challenge to the access of food by urban dwellers and especially the vulnerable. Transportation challenges strain the fragile food systems of most sub-Saharan nations, making it more inaccessible to those with low incomes in urban areas, (FAO, 2009). The urban vulnerable spend the largest amounts of their disposable income on food purchases; therefore, it follows that they depend on cash incomes and gainful employment, which is not readily available, Kimani-Murage, (2014). Vulnerable households rely on extremely low levels of income, yet they sometimes pay more for goods and services compared to their non-slum counterparts, leading to elevated levels of vulnerability to food insecurity within their households (Cohen and Garret, 2010). Consequently, poor households are compelled to engage in food coping strategies such as prioritizing affordability over nutrition, opting for less nutritious but more affordable staple foods to satisfy hunger. These coping strategies compromise the quality, quantity, and variety of their diet, thereby exacerbating the challenges of food insecurity within these households, to (Shisanya et al. 2011).

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Available literature has documented how vulnerable households employ various food coping strategies to address food scarcity in their households. According Nzuma and Ochola (2010) Cordero-Ahiman et al (2018), Auya, Sutter and Barasa, (2023), vulnerable households obtain majority of their food items exclusively through purchase from markets. Gunawardhana & Ginigaddara, (2021), Leduka et al. (2015), Chatterjee et al (2012), Shariff and Khor (2008), all agree that prevalent food coping strategies of vulnerable households included the skipping of meals, reducing the number of meals per day and reducing their meal portions, practices adopted by a significant proportion of households facing food shortages thereby depicting the severity of the challenges these households encounter. Other studies have also documented food coping strategies used by households such as, the use of restrictive feeding practices including serving less homemade food and more pre-prepared food which is cheaper, eating less expensive foods and consuming seasonal vegetables (Berge et al, 2020) and Norhasmah et al (2010), begging for food, Malele (2012), while others depended on food safety nets and relief food programs from the Government, Faith Based Organizations and Non-Governmental Organizations, Kabui (2012), Gundersen and Ziliak (2014) and Farzana et al (2017).

Studies have also shown that some vulnerable households use a variety of food coping strategies such as collecting wild foods, in kind food payment, sales from livestock and household valuables, migration and wage labour, diversifying their livelihood; cultivating more crops, wage labour, seasonal migration to neighbouring communities during peak season and inter cropping, Wilhemina, (2008), and Negatu (2011).

The above literature portrays various strategies used by vulnerable households across the globe, however the researcher aimed to establish those specific strategies which were present in the study area of Nakuru Town West Sub County and how they impacted on the performance of parenting roles among the respondents in the study area.

II. METHODOLOGY

The study was carried out in Nakuru Town West Sub County located in Nakuru County Kenya between May and December 2023. Nakuru is among the most densely populated counties in Kenya with the study area having a high population density of approximately 798 persons per square kilometre. The population density in Nakuru Town has also been steadily rising to more than 500000 by 2021, Annan, Kagendo and Kweyu, (2022). This rise in population presents a challenge in food access and availability especially for the vulnerable households residing in the informal settlements thereby heightening the risk of food insecurity.

This study employed a descriptive survey research design, the study area being predominantly urban. The study utilized a sample of 381. The sample size selection was determined by Krejcie and Morgan (1970) sample determination table which recommends a sample of 381 for a study target population of 40000 in the study area. This study utilized three data collection methods, semi-structured questionnaires, focus group discussion and key informant interviews. The semi structured questionnaire was administered to 381 respondents by the researcher and research assistants who asked questions and recorded responses for analysis purposes. Respondents were accorded adequate time to give well thought out answers. The researcher conducted 6 Focus Groups Discussions (FGDs), one for each of the 6 wards in the study and participants for FGDs were purposively selected. Each FGD was comprised of six to ten participants. The key informants, comprising officers from the department of social protection, local administration, community leaders, local groups and representatives from non-governmental organizations, were selected based on their specialized knowledge and relevance to the research focus.

The data collected was analysed both quantitatively and qualitatively. Quantitative analysis involved the use of descriptive statistics to summarize and interpret the data, with the results being presented in terms of frequency tables and cross tabulation. Qualitative data from Key Informant Interviews and Focus Group Discussions focusing on food coping strategies and how they have influenced parenting roles, were transcribed, coded, and thematically analyzed.

III. RESULTS AND DISCUSSION

Food coping strategies of vulnerable households

To gain an understanding of how food coping strategies in the study area have influenced performance of parenting roles, the study first sought to investigate what food coping strategies were used by vulnerable households to address food insecurity. The responses are shown in table 1 below.

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Table 1: Food Coping Strategies of Households

Food coping strategies of households	Frequency	Percentage	
Purchasing food	156	41	
Eating cheaper foods	96	25	
Reducing meal sizes	68	18	
Borrowing	49	12	
Food assistance programs	12	4	
Total	381	100	

Field data, 2023

As depicted in table 1 above, households in the study area employ various strategies to cope with food shortages. 156 (41%) reported that they purchased food from the market, a further 96 (25%) held that they purchased and ate cheaper and less nutritious foods, 68 (18%) resorted to reducing their meal sizes or portions, 49 (12%) borrowed food from neighbors and friends while 12 (4%) mentioned that they occasionally depended on food assistance programs.

According to these findings, households in the study area heavily rely on purchasing food from the market as the main food coping strategy. This phenomenon is attributed to the cash-based system of the study area which has rapidly urbanized and is characterized by predominantly low-income residents. Due to rapid urbanization and population growth in the study area, it follows that there is no land for residents to farm and grow food and therefore it means that food is mainly accessed through purchasing from the market on a day-to-day basis. This finding therefore agrees with a USAID (2013) study which concluded that rapid urbanization and high population in Kenya has resulted to development of slum like areas characterized by high population and low incomes leading to increased populations of food insecure people. This was reiterated in the focus group discussions where a participant held that

"Here as you can see, there's barely space for roads, let alone a garden to grow vegetables. So, the only way to get food is by buying it from the shops and markets you see around. Simply put, you've got to work, make money, and then use that money to buy food because without money, you will not eat. Living so closely together means there's no room for personal gardens to grow your own food. You depend on the shops and markets nearby, and that depends on having money. Female 25 years

This is a clear depiction that food access in the study area is largely based on income the households get since they cannot be able to grow crops or vegetables owing to urbanization and population increase in the area meaning no land to farm. They therefore rely on their strained incomes to get access to food. This finding concurs with literature from Kimani – Murage (2014) who held that even the most vulnerable in the cash-based economies rely on incomes to access food from the markets and hence access to an income is crucial for food security of the populations living in such areas.

The study further uncovered that a significant number of the respondents (25%) relied on purchasing and eating cheaper and less nutritious food as a means of addressing food insecurity in their households. The study attributed this to the high cost of fresh food and vegetables from markets which families cannot be able to buy daily. In the focus group discussion this was further elaborated when a participant noted that his family at times resorted to buy cheaper street food such as "chips mwitu" (openly fried potatoes), 'mandazis' and instant noodles to eat with black tea or water. The respondent further held that buying fresh food is at times uneconomical since it must be accompanied by something else. He expounded that for instance, when he wanted to eat ugali and Sukuma wiki, he also had to add onions and tomatoes and sometimes meat and eggs, which combined further, strained his income as compared to cheap street food. This finding agrees with Norhasmah et al (2010) who observed that food insecure households bought less expensive and less nutritious food to ensure food security of their households.

A further 18% of the respondents indicated that they often reduced the meal sizes or portion sizes of their meals as a way of dealing with food insecurity in their households. The study established that this strategy was common in households with very young dependents and households with elderly dependents. These were some of the sentiments in the focus group discussion.

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"In my household, it's a regular thing for me to eat smaller portions so that my children can have enough. Being a man, I can manage with just one meal, but for the children and my elderly mother, it's not realistic to expect them to go through a whole day with only one meal. Male 42 years.

Another participant added.

"Being a single mother is already quite challenging, especially with an inconsistent income. To make sure my three kids have enough to eat, I sometimes end up eating smaller portions of the food I buy, giving them the larger share. There are also times when I serve smaller portions to all of us, making sure there's some left for later, especially on days when I haven't earned enough money. Female 33 years

These findings agree with Berge et al (2020) who argued that food insecure families use food restrictive practices such as limiting the meal portions to ensure there is enough food for everyone in the household.

According to the findings from this study, 12% of the respondents stated that they borrowed food from friends and neighbours whenever they could not afford to buy food. It also emerged that respondents borrowed money from friends and relatives to buy food. This was affirmed in the focus group discussions in which participants noted that borrowing money to buy food was common in the study area. The most vulnerable households in the study area particularly depended on borrowing food items and money to buy food. One participant said:

"There are those days when work is just nowhere to be found, and you find yourself with no earnings at all. But, despite that, the pressing need to feed the children doesn't take a break. On days like these, the only real option left is to either borrow money to buy food or directly borrow food itself. Sometimes even no matter how hard you look, there's simply no work available.

Additionally, this study revealed that a portion of the respondents, 4%, sometimes depended on food assistance programs. This was confirmed by a key informant interview with the area chief who held that whenever there was a food assistance program, the lines would often be long. He however maintained that the most vulnerable households would be identified and mapped to ensure that they are first to receive food assistance.

"We offer several support services to help vulnerable households with food assistance. Government Cash Transfer Programs provide direct financial aid to help families buy food and meet basic needs, aiming to ease their economic struggles. Additionally, Community-Led Initiatives and collaborations with local NGOs offer food aid, organize feeding programs, and provide training in skills like soap making, along with the tools to start small businesses. These efforts not only address immediate food needs but also help families become self-sufficient in the long run."

Furthermore, according to key informants, support groups have experienced growth, with the number of young mothers increasing steadily. This expansion has led to the establishment of merry-go-rounds, facilitating the engagement of several young mothers in income-generating activities. Additionally, recent government initiative involves cash transfers to vulnerable households. While the community actively participated in assessing and identifying vulnerable households, there is acknowledgment that only a few were selected for assistance. There is however a suggestion for enhanced engagement with community promoters in the identification process to ensure a more comprehensive and effective reach, aligning with the established threshold for assistance

Further to this, the researcher conducted another key informant interview with a representative from a local NGO operating within the study area, to assess the accessibility of these support services to the vulnerable households, and the following were the sentiments of the representative:

"Our collaboration with community promoters has truly been a game-changer in making support services more accessible to vulnerable households. They, play a crucial role in ensuring that information about available assistance reaches the community effectively. Their door-to-door approach ensures that no household is left uninformed or overlooked. These promoters act as the vital link between support programs and the community they serve.

The key informant however noted that there were notable gaps and challenges in the existing support services that warrant attention. One significant issue was the limited coverage, where some vulnerable households may not be adequately reached or supported by the current assistance programs. It was noted that this gap arose from challenges experienced in identifying all eligible households and limitations in the resources available for assistance.

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Influence of households' Food coping strategies on parenting roles:

Table 2: Cross Tabulation for influence of households' Food coping strategies on parental roles

What food coping strategies have you used in your household? How has the coping strategy above affected your parental roles?								
		How has the coping strategy above affected your parental roles?						
		Depression	Feelings of guilt and shame	Strained parent child relationship	Stress and anxiety	Total		
What food coping strategies have you used in your household?	Borrowing from neighbors/friends	0	32	42	54	128		
	Eating cheaper/less nutritious meals	20	18	0	22	60		
	Food assistance programs	16	20	0	19	55		
	Purchase from markets	0	38	20	22	80		
	Reducing meal sizes	0	18	25	15	58		
Total		36	126	87	132	381		

It was evident that vulnerable households in the study area used various food coping strategies to address food insecurity and therefore the study sought to understand the how these coping strategies to food insecurity influenced the performance of parenting roles of respondents in the study area. In the focus group discussions, the researcher asked the participants to discuss how food coping strategies have influenced the performance of their parenting roles. Indeed, the study established that coping with food insecurity and the associated strategies have had a significant impact on the performance of parenting roles in the study area.

To begin with financial constraints have resulted in feelings of depression and anxiety for the parents. Purchasing food, being the major coping strategy, requires steady income which is often very difficult to obtain. The type of work most of the respondents engage in does not assure them of a steady and stable income and hence they strive to find income by any means possible to ensure that they can purchase food. This causes anxiety and depression among the parents, at times affecting their relationships. One participant had the following to say about this issue.

"When money is hard to come by, it's a tough reality, especially with the kind of work we do. Even when we do earn, it's often not enough to cover all our needs, which causes significant stress. This financial strain sometimes leads to arguments between me and my wife. The pressure to stretch our limited income can affect our emotions and relationships. The constant worry about money also means I spend less time with my kids, creating uncertainty about their well-being. The need to earn a living often takes priority over being present with my family, which adds to the overall stress. Man 48 years.

Participants reported that financial constraints they experienced led them to constant worry about providing enough food for their families, and this distracted parents from their parental responsibilities. This distraction affected their ability to engage with their children, provide emotional support, and be actively involved in their education and development. These findings agree with Masarik and Conger, (2017) who established that parental depression, anxiety caused by economic pressures can trigger relationship problems between parents and this distress can also influence parenting. While the authors confirm that economic stress affects parenting, their analysis is less focused on the specific challenges of food insecurity and its immediate effects on parental involvement. Instead, they provide a more general examination of how economic pressures contribute to parental distress and relationship issues, covering various financial challenges beyond just food-related stress.

The study further established those coping mechanisms such us relying on less nutritious foods and reduction of meal sizes led to a decrease in the nutrient intake of households and especially of the young dependents. When parents must

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reduce portion sizes to stretch limited food resources, it resulted in discomfort for both parents and children resulting to a strained parent child relationship among some of the respondents. This affected the mood of both parents and children and made it difficult for parents to concentrate, be patient, and effectively handle parenting challenges. The study further revealed that parents felt guilty when they could not provide sufficient meals for their children, and this further impacted their emotional well-being and ability to perform their parental roles. In the focus group discussions participants noted the following.

"I worry all the time that I'm not doing a good job as a parent. When I go to the market, it's hard. I must choose between what my kids need and what I can afford. Not being able to provide them with something as basic as food makes me feel bad about myself. Work is tough too. It's hard to focus on my job when I'm always thinking about how there might not be enough food at home". Female 36 years

Another added,

"When we didn't have enough food to eat in my house, and I had to make the meals smaller, it was hard. My kids were not happy because hunger messed with their moods. They found it tough to focus on their schoolwork, and that made me sad as a parent". Male 36 years

The above narrations show that coping with food insecurity has a significant impact in the performance of parenting roles by respondents in the study area and that this also affects parent-child relationships. These results concur with Leung et al, (2022) that parents may not be able to effectively shield their children from the distressing experience of food insecurity and that the psychological distress of food insecurity may be transmitted from parents to children.

Additionally, with regards to borrowing, the study established that relying on borrowing, whether its money or food, created a sense of insecurity and instability within the household. Parents were constantly worried about repaying debts or being able to secure enough food for their family in the future. This financial stress affected mental health and overall well-being, diminishing their capacity to be fully present and engaged in their parental responsibilities.

"Having to borrow money just to get food has been a regular thing for me, and to tell you the truth, it's been hard. I'm always worried about how to pay back what I owe and get more food. I am usually anxious and that doesn't go away. Every moment, I'm thinking about the debts and how to make sure we have something to eat. The stress makes me always feel on edge and instead of being there for my kids and focusing on their well-being; I'm stuck in this cycle of worrying about money "Male 40 years.

These sentiments agree with McGordic et al, (2022) and Mabuza & Mamba, (2022) who noted that although borrowing can be a coping mechanism to food insecurity, it is not sustainable and can further exacerbate vulnerability and food insecurity.

While these studies recognize that while borrowing can temporarily alleviate food insecurity, they primarily discuss the broader implications of this strategy, such as its unsustainability and potential to worsen overall vulnerability. They however do not delve as deeply into the personal emotional effects described in the respondent's account.

These consequences of coping with food insecurity had a profound effect on the relationships between parents and their children. Parents were often preoccupied with worries about food, leaving them unable to fully engage and contribute to their children's growth and development. The constant concern about food overshadowed their ability to provide the emotional support and nurturing environment that children require. As a result, the impact on parenting roles was evident, hindering parents' capacity to meet their children's needs and positively contributing to their overall well-being.

In addition, a key informant interview further provided insights to how long-term impact of sustained food insecurity coupled with the parents strained ability to fulfil their roles can impact on the well-being of children in vulnerable households. The following were the sentiments of a community health worker in response to this issue:

"Certainly, continued food insecurity in vulnerable households will have far-reaching consequences that could extend well beyond the immediate health implications for children to include various aspects of their lives, for instance limited education opportunities, and social mobility. To start with, malnutrition and inadequate access to nutritious food can impair cognitive development in children which can potentially result in difficulties concentrating, learning, and retaining information, contributing to academic challenges and hence increase the rate of school dropouts and so on... Children

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facing food insecurity may miss school more frequently due to health issues, leading to gaps in education, making it harder for them to keep up with their peers.

Therefore, according to these findings, when children in vulnerable households within the study area experience prolonged food insecurity, the impact goes beyond their immediate health. It can affect their education, limiting their cognitive development and school attendance. This, in turn, will restrict their access to opportunities for skill development and participation in extracurricular activities. The cycle of poverty is reinforced as these challenges hinder the children's ability to break free from the constraints of food insecurity, impacting their long-term socio-economic prospects. The study unequivocally demonstrates that the food coping strategies employed by the respondents significantly affected their performance in parenting roles. The stress, financial strain, guilt, and shame associated with food insecurity had a tangible impact on parent-child relationships.

The findings of this study however stand in contrast to the observations made by Tester et al. (2020) and Jansen et al. (2018), who highlighted a significant relationship between food insecurity and children's eating behaviours. Their research suggested that when faced with food insecurity, children may overeat when food is available. This behaviour is often attributed to a disrupted sense of satiety, which occurs as children experience the uncertainty of future food access. As a result, their ability to recognize fullness can become compromised, leading to overeating during periods of food availability. This study found no evidence of such overeating among children. A key factor contributing to this discrepancy may be attributed the role of parental regulation in food intake. Parents played a crucial role in managing their children's eating behaviours, ensuring that food consumption was balanced and appropriate. This in turn mitigated the tendency to overeat, even in situations where food was available.

IV. CONCLUSION AND RECOMMENDATION

Households have employed various food coping strategies to deal with food insecurity in the study area and this has had an influence on the performance of parenting roles as well. The study concludes that because of the cash-based economy of the study area, vulnerable households are forced to purchase food to be able to address food insecurity. However, for many vulnerable households, accessing sufficient income to consistently purchase food presents a significant challenge. These coping strategies often involve compromises and may not provide sustainable solutions; they highlight the trade-off between quantity and quality when facing food insecurity, as households prioritize meeting their immediate calorie needs over long-term nutritional requirements. Food coping strategies such as borrowing money to buy food or borrowing food from neighbours and friends also predisposes parents to feelings of guilt, shame, and inadequacy especially when they are unable to repay their debts and further slip into food insecurity. This continuous mix between economic pressures, coping strategies, and the resultant emotional and relational strain emphasizes the urgent need for encompassing interventions that address the root causes of food insecurity and support families in navigating these complex challenges.

The study recommends a focus on creating an enabling environment for sustainable coping strategies while addressing the economic root causes of food insecurity. For instance, implementing income-generating programs, vocational training, and small-business support. This will empower vulnerable households to break the cycle of dependency on short-term coping mechanisms. Additionally, it is crucial to enact policies that promote financial literacy and responsible borrowing for vulnerable households. This can be vital in mitigating the negative psychological effects associated with borrowing food. Finally, it is important to establish microfinance initiatives to provide financial resources for small-scale entrepreneurial activities including collaborating with financial institutions to develop accessible and low-interest credit facilities. This will allow households to generate income and build financial resilience.

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