

The Challenge of Low-Income Families to Obtain Healthy Nutrition in Jamaica

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Abstract

This study assessed the vulnerability of different categories of workers in obtaining healthy nutrition during a period of major economic reform. The costs of 158 food items were averaged from supermarkets, municipal markets and wholesale outlets in six parishes across Jamaica. A nutrient cost analysis program was used to select nutritious foods with low cost. The cheapest daily cost of a 2400 Kcal diet varied considerably by parish but was on average J\$265.95. For a family of three this translates to 106.8% of the salary of minimum wage workers; 59.6% for clerks; 20.6% for registered nurses and 16.4% for managers. This study argues that while macro-economic indicators are important to justify the introduction and monitoring of structural adjustment programs, it is vital to embed policies which ensure reduced economic and social vulnerability at the household level.

Key Words: Food Cost, Healthy Diet, Nutrition Economics, Jamaica

Introduction

This study was conducted in 2014 when Jamaica was combatting a debt to GDP ratio well over 140% and had resorted to a four-year Extended Fund Facility with the International Monetary Fund (IMF) [1]. The aim of the structural adjustment program with the IMF encompassed significant economic policy changes and warranted drastic government public spending cuts and other state-sponsored economic activities. The adjustment program was expected to lay the foundation for improved economic outcomes over time but it quite possibly also affected the social fabric of Jamaica, particularly in health and nutrition. Although this is not an impact study it points to some nutritional challenges many households faced during this period of structural adjustment.

The cost of food is a major factor in assessing the economic vulnerability of a household and it also plays a key role in the eating habits of families. Food prices are therefore central to purchasing patterns. Studies show that energy dense diets usually represent the lowest-cost option to the consumer [2]. Often the fats and sugars are heavily subsidized and calorie-laden foods have become the cheapest and most appealing to the poor consumer. For children, the promotion and marketing of these energy-dense foods lead to adverse health consequences [3]. High energy diets are associated with lower expense than less energy dense but more nutrient rich diets [4]. In 2013 an analysis of 27 studies from 10 countries (none Caribbean) showed that the healthiest diets cost US\$1.47 more per day than the less healthy options [5]. This observation that healthier diets may indeed cost more has one glaring policy implication-encouragement to consume healthy diets is irrelevant to the poor if these diets are unaffordable. This study was conducted to determine the lowest possible cost to obtain a nutritionally balanced 2400 Kcal diet in Jamaica and importantly, what proportion of different workers' salaries was required to obtain that low-cost diet. The fact that a wage freeze was an important component of the structural adjustment program means that the circumstances described will obtain for a prolonged period.

Methods

Food price data were collected from six parishes across Jamaica -Portland; St. Elizabeth; St. James; St. Ann; Manchester and Kingston & St. Andrew (KSA). In order to increase the applicability of the results, prices were obtained from densely populated areas and from

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vendors which were most popular among consumers in each parish. The prices of one hundred and fifty eight food commodities were sought during the month of June 2014. These prices were collected from popular supermarkets, wholesale and open markets in each of the six selected parishes. Trained data collectors were used for price collection and data entry.

This study used the Nutrient Cost Analysis program developed by the Caribbean Food and Nutrition Institute [6]. The program calculates the cost of food energy and protein from different food sources. The program ranked foods within specified food groups in ascending order based on cost of energy and protein. In keeping with the goal of providing variety-the program selected from a reasonably wide range of food items and also did not select certain items that are very similar from one food group. The program computed a diet/basket of foods which provides 2400 Kcal under given parameters based on the contribution of food groups to total energy(Kcals) and number of items selected from each food group. The caloric distribution and the number of items selected were determined based on nutrition and health considerations and attempted to provide a relatively low-cost food basket that will be consistent with dietary guidelines which will provide a reasonable variety of foods from the food groups [7]. The cheapest commodities by food grouping from which a 2400 Kcal balanced diet can be chosen. Previous analysis shows that the cheapest cost, on average, of the diet is J\$265.95 [7].

Results

Table 1 shows the most recent poverty trends by parish [8]. The data indicate that Kingston/St Andrew with the highest poverty rate in 2012 had the cheapest basket in 2014. But that poverty rate in the parish doubled between 2008 and 2012. Portland and St. Elizabeth with relatively high poverty rates in 2012 had the most expensive baskets. The high poverty rates in these two parishes were trending up in Portland and down in St. Elizabeth. Although the exact poverty rates in 2014 are not yet known, there was a poverty rate of 19.9% in 2012 for Jamaica overall which reflected a 2.3% increase in recent years. The trends suggest that many families were under major economic stress during the time of this study.

In the absence of exact poverty rates for 2014 the study used another indicator of vulnerability-income during that year. Nutrient cost analysis was therefore used to assess vulnerability of families by comparing their salaries with the cost of low-cost healthy nutrition. Table 2 shows the percentage of salaries required to obtain low-cost foods by parish.

Apart from Kingston/St. Andrew the cost of the cheapest family diet in the other parishes was above the prevailing minimum wage. Almost 60% of the salaries of other lower income workers must be used to obtain these diets. This ranged

Parishes	Cost of cheapest basket (2014)	% poverty trend 2008-2012
Portland	307.83	17.3 - 21.5
St. Elizabeth	307.26	30.6 - 23.8
St. James	259.02	8.5 - 11.2
St. Ann	253.64	12.5 - 18.4
Manchester	252.58	15.3 - 22.5
Kingston/St. Andrew	215.34	14.5 - 28.6

Table 1: Cost of the cheapest basket (2400 Kcal) and poverty trends by parish

Parishes	Minimum Wage	Clerk / Cashier+	Registered Nurse / Trained Teacher+	Manager / Accountant+
Portland	123.7	69.1	23.8	18.9
St. Elizabeth	123.5	68.9	23.8	18.9
St. James	104.1	58.1	20.0	15.9
St. Ann	101.9	56.9	19.6	15.6
Manchester	101.5	56.6	19.5	15.5
Kingston/St. Andrew	86.5	48.3	16.7	13.2
Average	106.8	59.6	20.6	16.4

+ Salaries based on mid-point mid-level existing scale. (Ministry of Finance & Planning, 2015)

Table 2: Percentage of salary for the cheapest healthy family diet for different categories of workers

from 48.4% in Kingston/St Andrew to 69.1% in Portland and St. Elizabeth. Workers in the higher categories would need to spend 20% of their salaries or less to obtain these cheap balanced diets.

It is important to note that while J\$265.95 is the cheapest cost generated by the computer program for a balanced meal those are not the food items that Jamaicans usually purchase. The study also revealed that if usually consumed foods were used for a 2400Kcal healthy diet the cost will be J\$490.03 on average across the parishes [9]. This means that the percentage of workers' salaries to obtain healthy diets by choice is 196.9%; 109.9%; 37.9% and 30.1% for Minimum wage, Clerk, Registered nurse and manager salaries, respectively.

Discussion

This study shows that the cost of the 'food basket' expressed as a percentage of the salaries of workers is a unique but important means of assessing the ability of households to meet basic nutritional needs

The link between poverty, obesity and chronic diseases has created a new public health challenge [10]. Central to that link is the cost of healthy food. Although Table 1 does not show a linear link between poverty and the cost of food it highlights the challenge of many poor families in purchasing a balanced diet. The results show that some parishes with high poverty rates also had high food basket costs.

It should be noted that if usually consumed foods are chosen the cost of a healthy diet increases by 184%. For the low-income workers such healthy diets cost more than 100% of their salary. In 2014, unskilled and non-professional workers comprised 58% of the total workforce of 1.3 million persons [11]. This means that 750,000 low-income salaries in Jamaica could not support healthy diets of a family of three persons. Because most households are larger than three persons it may suggest an even higher vulnerability. But those larger households also have more income earners which reduce the economic stress. Further, remittances from family abroad and national social safety net programs allow many households to cope. The results nevertheless show the high vulnerability of low-income families particularly those who have little support from the state or relatives. Although raising the minimum wage will not reduce poverty, these findings suggest that increasing the minimum wage will allow poor families to make better and healthier food choices if they use the additional cash for that purpose. It is recognized that a minimum wage increase will have ramifications for other sectors of the economy. This study nevertheless presents a compelling case for a minimum wage increase.

The assessment of economic vulnerability of families should consider the prevailing economic circumstances of the country. This study was done in the middle of the 4-year IMF program [1]. During this time the debt to GDP ratio has fallen from 147 to 126% in a few years and economic growth rates are slowly rising [12]. While these macro indicators are good it is unclear how the public spending restrictions affected the social indicators.

It should be recalled that since 1977 Jamaica entered several agreements with the IMF and although many were cancelled because of the failure to meet performance tests, the effects of the Structural Adjustment Programs (SAPs) remained. A major aspect of these programs is to reduce non-debt expenditures which clearly have effects on social services. Reduction of the staff complement in the public sector is another policy which has clear implications for increased economic dependency within families. Another major policy is exchange rate flexibility which will reduce the value of the Jamaican dollar and in turn will drive up the costs of imports and almost all costs [1].

These economic policy changes in Jamaica were introduced at a time when the economy was facing major economic instabilities and crises. Living standards and health status were already beginning to erode as purchasing power deteriorated and access to food and health care became more difficult. Targeted interventions by the government to soften some impacts of the SAPs were commendable. However, despite the range of these social safety net programs the evidence suggests that they were insufficient to significantly neutralize the harsh impacts of the policies. While it is not possible to directly link social outcomes to specific economic policies it is still worthwhile to note the social trends in specific periods. In 1989 the incidence of poverty in Jamaica was 30 percent and increased to 44.6 percent in 1991, but declined significantly after 1993 to a low of 15.9 percent in 1998. Between 1989 and 1998 the incidence of poverty was highest in rural areas (35 percent) compared to 16 percent in the Kingston Metropolitan Area (KMA). Moreover, 78 percent of those who were poor lived in rural areas, 13 percent in townships and 9 percent in KMA [13].

Relative earnings declined significantly between 1977 and 1985 and there were large increases in the number of workers whose income did not constitute a family wage. It was noted that there was some recovery in relative earnings between 1985 and 1989 but not to the levels before structural adjustment [13]. Using the CFNI least-cost basket of food items the analysis showed that between 1984 and 1986 alone there was a 46% increase in the overall price of the basket versus a 30% increase in minimum wage. The minimum wage was therefore not keeping pace with inflation. It showed further that two persons earning minimum wage in the family would not be able to purchase the basket. What this means is that there will not be any money left for on non-food necessities such as fuel, water, housing, among others. The costs of purchasing these non-food items were also trending upwards. Between 1980-1987 severe malnutrition among children attending public health clinics fluctuated between 0.3% in 1978 and 0.5% in 1985 [14,15]. Moderately malnourished children ranged between 2.9% in 1980 and 4.0% in 1985 [13].

Structural adjustment policies usually have winners and losers. The losers under adjustment are usually the poorest and least powerful in society. In summary, the adjustment policies

carried out by Jamaica between 1980 and 1996 imposed a harsh burden on the poor. However, many were able to devise coping strategies to nullify the elimination of subsidies on goods and services as well as inflation and currency devaluations.

Jamaica is likely to enter another agreement with the IMF after the current one expires. Although the debt to GDP ratio has fallen during the current structural adjustment period, a wage freeze was still in place and many of the old economic problems remain such as high external debt servicing, low growth, high unemployment, low purchasing power among the poor, among others. In addressing these, this study suggests that economic policies should be formulated with greater concerns for human welfare than were shown in the design of previous structural adjustment programs.

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