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Nutritional Woes in a Pandemic: A Developing Country's Perspective

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Abstract:- In human history several novel communicable viruses have severely impacted global economies. Consistent with the impact on economy, the capacity to earn, food safety and security as well as individual access has been severely limited. The subsequent impact on families and households is considerable. Nutrition is one important mitigator of health outcomes, but it is severely threatened in pandemics. An examination of nutritional impact of a pandemic in a developing country is essential for mapping risks and proposing strategies to mitigate the impact on households.

Keywords:- *Covid-19 Pandemic, Food Safety, Food Security, Insecurity, Nutritional Impact, Health Outcomes, Mitigation.*

I. INTRODUCTION

In the last century, the world has experienced several pandemics including, the HIV/AIDS pandemic, the Asian Flu pandemic, several FLU pandemics and the cholera pandemic. These health crises have together accounted for the deaths of approximately 100 million people and the Flu pandemics singularly, accounting for half of that total (Nguyen-Van-Tam, & Hampson, 2003). It is impossible to predict the genesis of a pandemic and so the impact and the preparedness are uncertain. Notably, however, pandemics especially those arising from infectious diseases like the Flu and more recently the Novel Coronavirus have crippling impact on commerce and trade. Industrialized countries with developed economies, significant foreign reserves and large national food reserves are more likely to fare better than economies that are reliant and depend on significant food imports. The duration and the severity of the pandemic may be a determinant of the social and health outcomes of these countries. Importantly, the nutritional status of an individual is an important mitigator in illness outcomes (Webb, Lichtenstein, Tucker, & Akabas, 2018; Wright-Myrie, Kahwa & Dover-Roberts, 2013). In developing countries however malnutrition continues to be a public health challenge and rather than supporting disease recovery, poor nutritional states serve as a negative modifier in illness outcome in low- and middle-income countries such as Jamaica (Wright, 2019). It is therefore important to examine the risk of nutritional challenges that may arise in the face of a pandemic and to offer recommendations to attenuate the possible negative outcomes.

II. NUTRITIONAL IMPACT IN COVID-19

In many developing countries, food is primarily obtained through import with a relatively unstable and unreliable agricultural sector. During a pandemic, the high dependency on the ingress of basic food items, particularly cereal including rice, maize and wheat makes Agrarian and low-income countries very vulnerable. This susceptibility is compounded by the severe restrictions to travel. Food imports have remained relatively stable though the world has now experienced four to five months of the COVID 19 pandemic. The experts predict, however, that with prolongation of the pandemic, wheat, maize and other cereals may be restricted in its export from large self-reliant developed countries. The resilience of the countries that will be affected, will be measured by their capacity to respond, primarily through the structured response of their internal agricultural sectors. Notably, the poverty rates of developing countries like Jamaica extend to as high as approximately 20% of the population and this group of individuals is highly dependent on cheaper energy dense foods such as cereals (Henry, Lawrence, Caines, & Eyre, 2018). The primary features of public health response to COVID 19 include social distancing, human restrictions and to some extent confinement. The World Organization has identified that this has significant impact on food security, particularly access and availability (World Food Programme 2020a; Burchi & De Muro, 2016; Havas & Salman, 2011). Moreover, food insecurity, while not an immediate reality in low- and middle-income countries at the beginning of a pandemic, is a serious risk that may develop. Disruptions to economic activities, which occur as a direct or indirect result of public health policies, directly put the most vulnerable groups at risk, particularly the poor and daily wage earners. The curtailment hours of curfews, the closure of high-risk settings such as bars, the limit on public gatherings all impact the poorest of the society who include peddlers, vendors, bartenders and daily income earners. Where it is that the monies that are usually earned on a daily is significantly limited in view of these restrictions other arms of food insecurity emerge. Food access which refers to a household's ability to acquire food based on purchasing, battering, trading or growing is meaningfully eroded with limitations on their capacity to earn (World Food Programme, 2020b). In keeping with the

public health orders, industries such as tourism has significantly contracted in developing countries like those in the Caribbean. Farmers, hotel workers, craft workers, tour guides, transport workers among many others are among the most significantly affected by this change. There is also unprecedented fear which, together with the curtailment of movement, also affects the production sectors. When production is impacted the other element of food insecurity may break and that is the availability axle. Food availability relates to food being present in sufficient quantities to meet the needs of the population. In many countries as well, following the fall in manufacturing there may be a resultant change in prices which further impacts the access of the population. The cycle of food insecurity when there is a pandemic is vicious and must be managed judiciously if the best social and health outcomes are to be realised.

III. THE RECOMMENDATIONS FOR NUTRITIONAL STABILITY IN A PANDEMIC

To properly combat food insecurity and nutritional instability in a pandemic, the most vulnerable must be protected. Furthermore, as food insecurity is satisfactorily addressed the positive impact of nutritional wellness may redound to positive health outcomes of the populace if they become infected with infectious diseases such as COVID-19. In managing the risk of food insecurity, the national response should fundamentally include accessing the census and identifying the most vulnerable population. This may prove challenging for some developing countries whose census may be inaccurate because of improper updates of birth and death records or have poor recording keeping and have citizens who are extremely remote. Nevertheless, using national censuses and expanding the estimates by a margin of error may prove to be useful in projecting the needs of the most vulnerable. Furthermore, expanding local agricultural production is important to mitigate against any shortfall that may occur in availability if imports were significantly affected. Where famers produce for tourism is impacted, local provisions can be redirected into the manufacturing sector to produce commodities with longer shelf life. Moreover, farmers should be recognized as essential workers with the privileges to continue to work even within public movement curtailment. Sanitation and personal protective equipment should be provided to this group of workers so that the critical agricultural sector can be assured of continuity in the face of the pandemic. While the ports remain open, the governments of countries that are dependent on exports should increase their imports of non-perishable items for expansion of and storage in the countries reserves. Additionally, governments need to strengthen bilateral agreements and examine food aid portals that may become necessary where the pandemic is prolonged. Nationally, the government must also respond to the needs of the displaced vulnerable by establishing delivery points for care packages for the most vulnerable and home deliveries for those who are shut in. The success of the programme will be dependent on the resources reaching the most vulnerable and having as little leakage as possible. Notably, the government of Jamaica and other low and middle income countries have begun a response to protect the most affected and vulnerable in their countries. Some of these strategies include; improving financial resilience through reduction in interest rates, extension of repayment periods, payment holidays and financial aid to citizens who experience job loss directly as a result of the pandemic. The nutritional and social programmes have been expanded with more frequent deliveries of food items in Jamaica. These are the more immediate responses to the pandemic, for greater success the recommendations offered hitherto are to be examined and implemented for a fulsome response, especially if there is protracted COVID-19 impact.

IV. CONCLUSION

Many pandemics have affected the world to date. COVID-19 presents a significant risk to economic, social and health outcomes. Nutrition is among the issues affected by the progression of this pandemic. With the potential to mitigate the health outcomes, if maintained optimally, nutrition continues to be a concern for many nations including those that are developing. Public health policies directly and indirectly impair food security and nutritional wellness of impacted countries. Comprehensive national and international response including significant support of the agricultural sector may prove essential in mitigating the negative associated outcomes.

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