The Impact of Poor Health and Nutrition on Education in Kenya

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Abstract

Poor health and nutrition prevent children from attending school and effectively participating in learning. This is why the UNESCO, UNICEF, WHO and the World Bank to launch the Focus Resources on Effective School Health (FRESH) during the School health and Nutrition Framework at the World Education Forum in Dakar in 2000 as an effort to mainstream school health and nutrition in education sector programmes. Notably, learners' nutritional status and educational performance are strongly related. As a result, enhanced health leads to higher educational achievement and healthier students who learn new skills and competencies more efficiently, and invest more in schooling. Consequently, well-nourished students miss fewer days of school due to illness, while the malnourished ones are not as productive. Chronic malnutrition inhibits growth, retards mental development and reduces motivation and energy levels, resulting to a reduced educational attainment and delay in school entry. School health and nutrition programmes contribute not only to health outcomes, but to improved access to and completion of education as well. The goal of universal education cannot be achieved while the health needs of learners remain unmet; therefore, a core group of cost-effective activities must be implemented for learners in all schools towards meeting their needs and to deliver on the promise of Education for All (EFA). This paper assesses the basic facts about health and nutrition and its impact on primary education in Kenya. It will also explore problems and issues in health, nutrition and education, and suggest possible solutions.

Keywords: Nutrition, Health, Education

Introduction

In developing countries, Kenya included, more than 200 million school years are lost annually due to ill health, and the impact on learning and cognition is equivalent to a deficit of more than 630 million IQ points (World Bank, 2013). This has led to paradigm shifts in school health and nutrition programmes in low-income countries, most significantly over the last two decades. Emphasis has shifted from a medical approach that favoured elite schools in urban centres to an approach that improves health and nutrition for all children, particularly the poor and disadvantaged. School health and nutrition programmes not only contribute to health outcomes but also contribute effectively to improved education access and completion of education.

According to Jukes, Drake and Bundy (2007), poor health and nutrition have effect on children's access to education. It delays school enrolment, increases absenteeism and precipitates drop-out. The authors, therefore, argue that school-based programmes play an important and effective interventive role that simultaneously addresses both education and health. They sum up the effects of poor health thus 'disease affects education throughout childhood; improving children's health and nutrition brings substantial benefits for education; improving health and nutrition brings greatest benefits to the poor and most vulnerable; and health and education reinforce one another.

Health, defined by the WHO as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity,' and nutrition, has far-reaching effects on education since the returns from investment in education last for a long time, and health status is positively correlated with life expectancy (Luzi, 2010). Whereas physical health is the general condition of a person in all aspects as well as a level of functional and/or metabolic efficiency of an organism, mental health is the capacity to express our emotions and adapt to a range of demands.

Learners who are healthy in all these aspects are able to participate better in school. They miss fewer days of school due to illness, are able to concentrate better in school, and participate in all school activities unlike if they were weakened by hunger and lack of nutritious food. This underscores the importance of improving the health and nutritional status of school-going children in order to ensure optimum and maximum gain from these children as they grow. The focus of this paper is to highlight on the impact of health and nutrition deficiencies on the primary school children in primary schools in Kenya, whose age range is 6 to 14 years. The rationale for this group of children is that while the younger ones are still under close care of their parents and guardians, those in primary schools spend much of their time away from home and their parents and guardians may be able to pay close attention to their health and nutrition status. By the time these children return back home, there may be only one meal which may

be insufficient in quantity and in nutritional value, whereas younger ones who spend much of their time at home may get more food at shorter intervals during the day. It is however worth noting that feeding programs in primary schools may vary considerably depending on the socio-economic statuses of children in most private and public primary schools. This means that nutrition, health and care may differ based on the ability of parents to afford a diet for their children once they are released from school, and whether it is in rural or urban set ups.

Materials and Methods

This paper is based on a desk-based research. It examines and synthesizes information from existing literature and policy documents to construct arguments on the impact of health nutrition on education in Kenya. The paper endeavours to help inform the education theory and practice in Kenya by identifying the key issues facing health and nutrition among learners in primary schools in Kenya. It also suggests potential solutions based on lessons learned from reviewed literature and summarizes solutions that could help in improving the status of health and nutrition and by extension education in Kenya, and highlights cost-effective policies that could boost health and nutrition status among learners in primary schools in Kenya, and therefore the education sector.

Results and Discussion

The Status of Health and Nutrition among Learners in Primary Schools in Kenya

Kenya lies in the impoverished the sub-Saharan region of Africa, a region that faces challenges of underdevelopment, food insecurity and therefore poor health. A large part of the country experiences prolonged spells of dry weather and food shortages, hence a substantial part of its population experiences severe drought, and suffer disease and hunger. Because of their tender and vulnerable nature, children are more affected by hunger and hence suffer health and nutritional deficiencies leading to retarded growth and development. Retarded growth and development among these children, translates to a low mental and physical development that will deny the learners ability to participate in education in full and to take advantage of learning opportunities in schools. This is best indicated in a recent study in Bangladesh that retarded growth increased with age. Consequently, younger school children reportedly had a prevalence of 2% compared to 16% among older children among older children (Ahmed, as cited in Parraga, 2006). In another study in Brazil, 21% of school-age children recorded retarded growth, and 13% were underweight and nutritional status continued to worsen as the study population got older (Parraga, 2006).

Kenya does not record a different trend as indicated by a study in Dagorretti Division of Nairobi by Mwaniki and Makhoha (2013), whose results indicated that boys in the primary schools had a higher rate of retardation and underweight compared to girls although the girls had a higher rate of wasting than the boys. According to the study, Kenya records an unhealthy meals' times whereby fewer calories of less than 12% of the daily energy intake were consumed at breakfast, and these limit optimal operation during the most active and busy part of the day. This left the children hungry for the greater part of the morning. Supper was a more important source of energy (45.3%), yet this was consumed at a less active period of the day which is usually spent in sleep. Food is available after receiving a day's earning since most Kenyans rely on purchased food as opposed to domestically grown produce. The effect of this inadequate food quantities and qualities may lead to lifestyle diseases like diabetes among many others.

Estimates by UNICEF (2000) indicate that millions of children of school-going age experience poor health and nutrition worldwide. The resultant effect of this is a loss of about 1 percent of these children's healthy years of life (Glewwe & Miguel, 2008). The impact of poor health and nutrition will be characterized by low enrolment into school, lower daily school attendance, and less efficient learning per day spent in school. This leads to reduced learning.

UNESCO (1989) identifies some issues of health and nutrition under seven categories of health conditions namely nutritional deficiencies, helminthic infections (including intestinal parasites and schistosomiasis), other infections (ranging from malaria to dental problems), disabilities, reproductive problems (including premature fertility, sexual violence, and exposure to sexually transmitted diseases), injury and poisoning, and substance abuse. All these are issues that bedevil children in primary schools in Kenya.

Despite the high cases of malnutrition, household food insecurity and a high school dropout, health and nutrition education intervention programmes which are very important in curbing malnutrition and other effects of poor health and nutrition have not been given much emphasis in Kenya. The formal teaching of nutrition in schools has, since independence, continued to take a declining trend and a peripheral place. Successive reviews of the school syllabus either omit or reduce essential nutrition education topics or content. Consequently, whenever any nutrition topics are included in the syllabus, they are few and contain minimal and usually inadequate content. This therefore means that with the high

primary school dropout phenomenon in Kenya due to various challenges in education such as the effects of diseases like HIV/AIDS, poverty and need to work for economic gains in the informal sector, most pupils leave school without adequate nutrition knowledge (Mbithe *et al.*, 2012).

Factors contributing to Poor Health and Nutrition among Learners in Primary Schools in Kenya

According to Mbithe *et al.* (2012), gender and societal attitudes play an important role in influencing the nutrition status of children. For instance, boys consider nutritional concerns as a female domain. This is especially because girls and mothers are the ones who make decisions about the types of foods and preparation of the family meals in most Kenyan communities. On the other hand, the school set up, being a miniature society that is based on the total way of life of the society within which it exists influences and/or grounds attitudes towards consumption of certain foods and taboos and/or beliefs. Some notable taboos include abstinence from consumption of certain foods like eggs and some parts of animal meat for girls and women. For instance, it was taboo for girls among the Akamba community to consume animals' heads and tails. This was based on the belief that if they ate the heads, they would dominate their husbands when they got married and that if they ate the tails, they may fail to settle in their marital home just like the tail that swings from side to side. They were also not supposed to consume legs or feet of animals, and were to avoid consumption of eggs, otherwise they would become thieves. Consumption of animal organs such as the liver would make the girls lose sight while others relate fish to the snake and therefore avoid eating fish and fruits that had snake patterns made one become like a snake, a clear indication that nutrition knowledge was lacking. These are societal views show how stereotypes on food and taboos and beliefs are carried into the school, which is a unit of the society.

Impact of Poor Health and Nutrition among Primary Schools in Kenya

Poor health and nutrition affect education performance and achievement a great deal. According to Jukes, Drake and Bundy (2007), the major health challenges faced by many infants, pre-school and school children include pneumonia, malaria, measles, micro and macronutrient deficiencies. This leads to frequent ailments which in turn inhibit school attendance and performance among the learners in these age groups. Many of these diseases and deficiencies are preventable and, among the schoolchildren who bear the greatest burden, the most vulnerable ones are the poor. Some of the notable effects of poor health and nutrition include lack of readiness to begin school at the usual age, failure to learn adequately while at school, and unequal participation in school. There is lack of cognitive stimulation, a resultant of poverty which affects the children's intellectual development and thus school achievement (Suhrcke & de Paz Nieves, 2011).

Poor health affects attention and concentration in activities, and in leaning activities, it will impede educational access, participation and achievement of students. Whenever the learners are sick or very weak because of severe malnutrition, they will miss school and in cases where they attend, they will be too indolent for any active school participation. This therefore means that they will eit her not learn at all, or they will not learn effectively since learning is a function of active and holistic participation of the learners.

There are major impacts of malnutrition and poor health that are experienced during early childhood, and which have long term effects on human capital growth and development. According to the findings of the research by Mbithe *et al*. (2012), food consumption by learners in primary schools depicts unavailability of and poor access to food, poverty and lack of knowledge and good nutrition. The low consumption of protein-rich foods, oils and nutritious vegetables is significantly associated to cost, availability and poor nutrition knowledge, although lack of consumption of some foods like fish could possibly be a result of negative traditions. Health and nutritional status records indicate that malnutrition levels are high among school going children, hence the need to provide this information and also programmes to enhance healthy feeding among these learners.

In studies conducted by Smith (2008) and Case, Fertig and Paxson (2005), children's education, health and third factors have major influence on differences in employment status and income at adulthood as well as their adult health outcomes, marital status, fertility control and engagement in criminal activities and in the educational achievement of their own children.

According to the Micronutrient Survey (2011), 20 per cent of Kenyan children of school-going age are underweight, an indicator to poor health status. This results from micronutrient deficiencies, which inhibit the learners' cognitive development. Such micronutrients include vitamins and minerals which are vital to health. Globally, 2 million children die from lack of vitamin A, zinc, and other nutrients; 18 million babies are born mentally impaired due to lack of iodine deficiency every year (Glennerster *et al.*, 2011). This implies that most of these children grow up suffering from poor health and other issues resultant of this.

Strategies to Counter Poor Health and Nutrition in Kenya

It is therefore important to introduce school-based health initiatives across all levels of the education system to boost the educational outcomes of students. Mediating factors in combating poor health will in turn can have an impact on educational outcomes. Ding *et al.* (2006) state specific outcomes as inclusive of cognitive and learning skills development, treatment received by children in the classroom in connection with their health condition(s), discrimination by peers, self-esteem and students' physical energy.

In line with the United Nations' efforts as indicated through the introduction of FRESH as a measure to mainstream school health and nutrition in education sector programmes, the government of Kenya has attempted various strategies towards improving health and nutrition among learners in primary schools in Kenya. Some of the strategies by the Kenya government include de-worming programmes, which have contributed to increased schooling and boosted participation, especially among the poor. Others include school based micronutrient supplementation and programs on HIV prevention, specifically those that warn girls about the HIV risk posed by older men have been shown to be very effective at reducing risky behaviour.

There should be introduction of school-based food and micronutrient supplementation to increase attendance, especially among the poorest children (Vermeersch & Kremer, 2004). This will complement gains from school feeding. Through a partnership between the Ministry of Education, the Ministry of Public Health and Sanitation, and the Kenya Medical Research Institute, introduction of School health programmes, about 3.6 million children were de-wormed by 2009 in Kenya. This effort is lauded to effectively increase school attendance (Miguel & Kremer, 2004). It presents a very effective alternative to promotion of access to education among primary school pupils and to also improve the long-run socio-economic outcomes of the country.

Although breakfast programmes have so far not been considered for introduction before, it should be introduced since daily breakfast or a meal at school improves children's scholastic achievement by activating the brain, which is sensitive to short-term variations in the availability of nutrient supplies. An observation in a school under *the Feed the Children* program with Kibera, Nairobi West supports this, since learners across all the classes right from class one to eight looked forward to the porridge served at 11 O'clock. For most of the learners, this was the first meal they took since the previous day's lunch meal served in school.

Leslie and Jamison (1990) conclude that the relationship between the girls' health and nutrition status and their participation and achievement in school was bidirectional. This means that enhancement of girls' health and nutrition status by reducing their own or their parents' concerns about unwanted pregnancy and sexual violence could increase the girls' participation and achievement in school. At the same time, more years of schooling and completion of higher levels of schooling are known to offer many important health and nutrition benefits to girls, among them delayed childbearing.

Another importance of improving school health and nutrition is school health and nutrition the likelihood to improve equity in education by helping girls and children from low-income families to attain good (or at least some) education. Jukes, Drake and Bundy (2007) hail it as an effective method of closing the knowledge gap between children from high and low socioeconomic groups thereby providing more equitable job opportunities in after-school life.

Other interventions that the government of Kenya needs to adopt in line with those of FRESH include:

Health-related School Policies

There should be enhancement and reinforcement of health policies in schools alongside skills-based health education and the provision of health services. This will help to promote the overall health, hygiene and nutrition of children. The health policies should ensure a safe and secure physical environment and a positive psycho-social environment. They should also address issues such as abuse of students, sexual harassment, school violence, and bullying. Policies on health-related practices of teachers and students can reinforce health education since the teachers can act as positive role models for their students. Reinforcement of the policies will be meaning if the different stakeholders at different levels of education developed them, including the national level, and teachers, children, parents and the school.

Provision of Safe Water and Sanitation

This is an essential first step towards a healthy physical, learning environment. By providing safe water and sanitation, the school will contribute to health of the learners by avoiding or limiting exposure to hazards, for instance water-borne infectious disease. The government should make it a realistic goal to ensure access to clean water and sanitation, and thereby reinforce good health and hygiene within the school and in the wider community.

Skills-based Health Education

This approach focuses on the development of knowledge, attitudes, values, and life skills that help learners to make and act on the most appropriate and positive health-related decisions. As a result, health extends beyond the physical health to include psycho-social and environmental health. This is especially important since changes in social and behavioural factors have contributed to increased health-related issues such as HIV/AIDS, early pregnancy, injuries, violence and tobacco and substance use. Development of attitudes related to gender equity and respect between girls and boys, and the enhancement of specific skills like dealing with peer pressure enable effective skills-based health education and positive psycho-social environments. They help individuals to adopt and sustain a healthy lifestyle during schooling and also later in their lives.

School-based Health and Nutrition Services

Although school feeding programmes have been initiated in some schools in Kenya, there is need to extend them into all schools. This is because the programmes can effectively provide health and nutritional services that are simple, safe and familiar. They can also address known problems that are recognized within the community for instance certain nutritional deficiencies prevalent in particular regions.

Conclusion

The importance of nutrition education to address malnutrition among school going children cannot be underestimated. Knowledge on nutrition is more likely to lead to positive attitudes and practices and hence better nutritional status. Health and nutrition education should be introduced in the early years of schooling to benefit all learners including those who drop out of school before completion of the primary school or who do not proceed to secondary school. Primary education being free and accessible to more children than secondary education expanding health and nutrition programmes at this level would reach more children and also at an early impressionable age. Overall, health and nutrition education has to be strengthened to effectively address malnutrition in Kenya. It is also notable that an important potential instrument to positively affect children's health and nutritional status is school-based policies, particularly since this age group and the conditions they face are often relatively neglected by the formal health services.

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