

Technology-Driven and Viable Child-Health Care for Enhanced Management of Universal Basic Education in Nigeria

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Abstract: The United Nations had set the Millennium Development Goal (MDGs) to assist developing countries like Nigeria to meet up with the standards attained in developed worlds. Among the goals of the MDGs is the achievement of the universal basic education. Nigeria, as a developing country is expected by 2015 to meet the provisions of MDGs on basic education. The study focuses on the Universal Basic Education (UBE) in Nigeria. It examines the objectives of the scheme, the components and the challenges; Universal Basic Education attracts mainly children between the ages of 5-14 years. In these years, children are vulnerable to diseases like malaria, polio and socio-economic related diseases like diarrhea, kwashiorkor, cholera etc. A handful is affected by HIV/AIDS while some children of HIV/AIDS parents are orphaned by this disease. Children with these diseases can not maximally benefit from basic education. The need for Nigeria government to technologically drive their effort for a viable child-health care justifies the study. It concludes by offering suggestions as to the improvement of child-health care such as better education of parents, use of television to facilitate instructions, aggressive media campaign and improved environment.

Key words: Child health care, universal basic education, HIV/AIDS, millennium technology-driven, Nigeria

INTRODUCTION

Nigeria education system is made up of pre-primary, primary, secondary and tertiary education. The present Universal Basic Education also includes the nomadic education and adult Education. Primary education is not only the foundation education but the oldest and has the highest patronage, hence deserves all the necessary focus and attention. The evolutions of primary education is clear and long but suffice to review briefly that the management of primary education started with the first primary school established in 1842 through 1882 when it was solely administered by various Christian missions. The colonial Government came up the stage between 1882 and 1940s. This was the beginning of rules and regulations codified in to ordinances of 1882, 1887 and 1914 etc.

On the eve of independence in 1960, the administration of education became the responsibility of Nigerian government. Many years after independence, Nigeria system of education was dominated by the British system of education. The much yearning of Nigeria that educational system should meet the aspiration of the

nation brought about the National Conference on curriculum development at Lagos in 1967. The efforts from this and subsequent seminars gave birth to the National Policy on Education in 1977, which has been continuously revised in 1981, 1989 and 2004.

The Nation Policy on Education has thirteen sections. Sections three and four and part of five deal with Basic Education i.e., Primary Education and Junior Secondary Education which comprise of the first nine years of education. These 9 years of education shall be free and compulsory. Also, FGN observed that free education is not new in Nigeria. Western Regional government under Chief Obafemi Awolowo launched a free primary education in 1955, Eastern Regional government under the leadership of Dr Nnamdi Azikwe followed in the same direction in 1957 which was not as successful as that of the west. The Federal Government also launched the Universal Primary Education (UPE) in 1976 and the latest in September 1999 the Universal Basic Education this is consonance with the 1999 constitution of the Federal Republic of Nigeria which states inter alia:

Government shall strive to eradicate illiteracy and this end, Government shall, as and when practicable, provide:

- Free, compulsory and universal primary education
- Free secondary education (section 18, sub-section 3 a-b)

The United Nations set the Millennium Development Goals (MDGs, 2008) to assist developing countries to meet up with standards attained in developed worlds. Among the goals of the MDGs is the achievement of the universal basic education. The United Nations expects that by the year 2015, there should be provision of quality education from nursery, primary and perhaps secondary schools for every citizen. One of the challenges facing the attainment of the UBE in Nigeria is the health conditions of the children attracted by this scheme. Is the Nigerian government putting in place a viable child-health care delivery?

Every Nigerian child need to be healthy so as to benefit maximally from this basic education. The school health programme should be aimed at ensuring that no child is prevented by some physical or emotional health defect from taking advantage of the educational opportunities offered him. It is therefore, expedient that viable child health care be put in place in order to achieve success of Universal Basic Education so that Nigeria will meet the set 2015 millennium development goals.

Universal basic education in Nigeria: Nigeria, recognizing that her educational system has deteriorated due to a number of reasons and coupled to inaccessibility of many Nigerian children to primary education because of poverty, decided to embark on a number of educational reforms in order to provide access and improve quality of education. Basic education has been defined as that level, type and form of learning needed to build firm roots for literacy and numeracy, to include basic life skills and more importantly, to consolidate the skills of learning how to learn.

In September 1999, Universal Basic Education (UBE) scheme was launched which aimed at developing in the entire citizenry a strong consciousness for education and a strong commitment to its vigorous promotion; provision of Free, Universal Basic Education for every Nigerian child of school going age; reducing drastically the incident of drop-out from the formal school system; Catering for school drop-outs and out-of-school children/adolescents, through appropriate form of complementary approaches to the provision and promotion of basic education and ensuring the acquisition of the appropriate levels of literacy, numeracy, manipulative, communicative and life skills (as well as the ethical, moral and civic values) needed for laying a solid foundation for life-long learning (EFA, 2000).

In attaining these objectives, measures that are being taken include: public enhancement and community mobilisation in sensitizing communities on the need to enroll children in schools, especially girls; adopting approaches that ensure the full articulation of formal and non-formal sectors; improving the teacher education, training professional development and motivation; enrichment and review of the curricular to make it more responding not only to the demands of the UBE but to the challenges of the next millennium; provision of textbooks, instructional and non-text materials; provision of adequate infrastructure and equipment and taking full advantage of the possibilities offered by new information and communication technologies for better quality education (EFA, 2000).

Challenges of universal basic education in Nigeria:

There are three components of the UBE scheme. These are formal basic education comprising the first 9 years of schooling (primary and junior secondary education) for all children; Nomadic education for school age children for pastoral nomads and migrant fishermen and Literacy and non-formal education for out-of-school children, youth and adults. These components were highly challenged by low level of education, training and motivation of teachers resulting in poor quality teaching, acute shortage of textbooks and instructional materials and inadequate funding (Arikewuyo, 2007).

The problem of poor funding has always generated a lot of debates in Nigeria. Funding of educational system has always been a contentious issue between the federal, state and local governments. The sharing formula as agreed in 2005 between the federal government and states is 50%, while the state also provides 50%. Fund utilization as approved is also pre-primary education 5%, primary 60%, junior secondary school level is 35%. Expenditure by activities in each component of UBE is also in this line, infrastructural development which includes classroom construction, furniture, renovation, toilets, borehole etc. is 70%, Text books and working materials like textbooks procurement in the core subject, library books, teachers' guide, teaching aids should be 15%, while teachers professional development is also 15%.

On study, this is good, but when one sees the dilapidated state of many primary schools one wonders if the fund allocated is judicious UBE. Three states in Nigeria i.e. Kaduna, Kano, Kwara, have increased the funding of basic education by getting a world bank to improve the funding of UBE in these states. The funding would be managed through School Based Management Committee (SBMC). This is a committee of school head, teacher and parents-teachers association and the

community. Several trainings had been organized for committee members in management and accountability of this fund.

Arikewuyo (2007) has shown that primary and secondary school teachers in Nigeria are not only dissatisfied with teaching profession but also have poor job attitudes due to poor motivation. If Government does not put in place those things that will improve teachers' welfare and make specific effort to motivate these categories of workers, Nigeria educational system may be singing the same old tune.

There is no gainsaying the fact that inadequate infrastructure and instructional materials constitute a major challenge to the implementation of universal basic education (Onasanya, 2003). After launching the UBE in 1999, like the UPE of 1976, there was population explosion in schools. The fact that, it is free attracted the large number of pupils coupled with the encouragement of girl-child education. The existing classrooms were inadequate and deliberate efforts had been made by UBE to provide more classrooms and renovate the existing ones. According to UBE Annual report of 2003 over ₦13 billion (₦3.3 billion) was released for UBE project of classroom construction, each state received 200,000 exercise books through ETF, other items include 6,533,247 biros, 919,756 drawing books, 31,734 attendance registers, 89,245 educational chart, 9,846,851 HS pencils, dusters, etc. with this efforts one wonders why some states still have their children learning under the trees and open air.

Child-Health problem is an area that UBE and educational administrators have not given adequate attention. If the government should supply adequate number of teachers coupled with enough classrooms and materials and children or the learners are not healthy, very little will be achieved. Many Nigerian children are not healthy. They go to school hungry, they are underfed; they are affected by malaria which is a common disease in Nigeria. They live in unclean environment and thereby contract dysentery, diarrhea, cholera and the like. Many children are also considered as people living with HIV/AIDS because their parents are HIV/AIDS positive, while some cannot even go to school because polio had made them to be physically challenged. This study deals with these specific challenges of UBE which have not been seriously addressed by the government.

Mitigating malaria as a major hazard to child health:

Malaria is a disease which can be transmitted to people of all ages. It is caused by para-species Plasmodium that are spread from person to person through the bites of infected. The common first symptoms are fever, headache, chills and vomiting. If not treated promptly with effective

medicines, malaria can be fatal. There are four types of human malaria but *Plasmodium falciparum* and *P. vivax* are the most common while *P. falciparum* is the most deadly type of infection. Malaria transmission differs in intensity and regularity depending on local factors such as patterns, proximity of mosquito breeding sites and mosquito species. Some regions have constant number of cases throughout the year while some as seasonal which coincides with the rainy season. Forty percent of world's population, mostly people living in poor countries are at risk of malaria. Every year, >500 million people become severely ill with malaria (WHO, 2007). Most cases and deaths are in sub-saharan Africa.

The control of malaria is mainly in two areas, which are controlling the malaria-bearing mosquito and interrupting transmission. Intervention would involve, indoor residual spraying with insecticide and insecticidal nets. Controlling the malaria breeding would involve the larval control or environmental management. World Health Organization (WHO, 2007) concluded that malaria has lifelong effects through poverty impaired learning and decreases attendance in schools and the workplace. This is the reason why every effort should be made to make Nigeria, malaria-free.

Polio as a major challenge to child health in Nigeria:

Polio known as poliomyelitis is a contagious disease caused by an intestinal virus that may attack nerve cells of the brain and spinal cord. Symptoms include fever, headache, sore throat and vomiting. Some victims develop neurological complications, including stiffness of the neck and back, weak muscles, pain in the joints and paralysis of one or more limbs. Polio can be contracted through contact with contaminated faeces or air borne droplets in food or water (Bonu *et al.*, 2004).

The virus enters the body by nose or mouth and travels to the intestines to incubate. It goes into the bloodstream. Only about 25% of the severe cases may result in permanent damage to the legs. Young children especially below 5 years are particularly susceptible. In Nigeria today, many children that should be in school are polio-stricken beggars on the street. Evidence has shown that the number of confirmed cases of poliomyelitis have actually dropped from the time that the Polio Eradication Initiative (PEI) started in Nigeria. Routine immunization and the PEI suffered a setback in Northern Nigeria as a result of some propaganda in the Muslim community that the western world is using it to promote family planning and infecting the children with HIV (Yahya, 2007). Saturday Punch of September 6th 2008 page 12 reported a village head in Borno State who allegedly divorced his wife for making his children take the oral polio vaccine.

However, the Nigerian government mobilized traditional and religious leaders to campaign seriously in support of the vaccine which has yielded positive result. Other developing countries like India and many sub-saharan countries have been able to reduce drastically the occurrence of polio in children through the oral polio vaccine.

Cholera, diarrhea and worm infection: Diarrhea is the frequent passage of loose, watery stools. It is an amoebic infestation. Allergic response to foods may also cause diarrhea. Diarrhea in children is mostly caused by infection due to poor handling of food and dirt. It is also much related to dysentery, which is associated with mucus and blood in the stool. Cholera and worm infestation belong to this family. They are due to amoebic infections. All these occur because of poor water supply. Children may also infect themselves by playing with soil contaminated with amoebic cysts. Large populations of Nigerians are still living under the poverty line and poor hygienic conditions. These diseases are still common causes of death among children.

HIV/AIDS issues and the UBE: Human immune deficiency virus, infects human and causes deficiency to the immune system. The virus is present in all body fluids, while AIDS is acquired immune deficiency syndrome, this is when the immune system is already affected and attacked and manifest in a combination of many diseases conditions, Clinical manifestation of HIV may take years while AIDS is more visible and this manifests in loss of body weight up to 10% loss, unresolved fever, unresolved diarrhea and a generalized body rash, 80% of transmission is through: unprotected sexual intercourse with an infected partner. 10% of transmission is through blood transfusion of infected blood and 10% from mother to child (during pregnancy, labour, breast feeding) HIV/AIDS can be prevented by avoiding casual sex, UBE of condoms consistently, integration of HIV/AIDS counseling in schools, avoid sharing sharp objects, rationalize the UBE of blood for transfusions (Senbanjo, 2006). School Children who have Parents infected by HIV/AIDS are also affected and so these children belong to the group referred to as People Living with HIV/AIDS (PLWHAS). Since, >25 million people in developing countries are now receiving life-lengthening antiretroviral drugs (Piot, 2007) and over 20 million persons have died of AIDS in sub-saharan Africa since the early 1980s (Heyzer, 2001) makes it important for the awareness of the pandemic to be created in the primary schools, Most lives that HIV/AIDS claim are those young adults and these are parents and the rate of orphaning associated with

HIV/AIDS are unprecedented in the history of human epidemics. The plight of millions of African children who have lost their parents to HIV/AIDS constitutes one of the gravest humanitarian crises. Children orphaned face a wide range of abuses such as sexual abuse by guardians, children drop out of school, loss of inheritance rights, child trafficking and hazardous labour.

Other diseases of the children that may affect their basic education is malnutrition as under-nutrition is a major contributing cause in more than a third of all under five child death. UNICEF (2008) believes that effort to address the nutritional needs of women, infants and children must be accelerated.

MATERIALS AND METHODS

This research is basically a position study, in which the researchers made use of and reviewed extensively, literature from books, journals, reports and publications of the World Health Organization and the Government's white paper on Universal Basic Education in Nigeria. Information and articles from the Internet were also used. Observational technique was also employed to assess the classroom environment of the Early Childhood Centres; the teachers were also interviewed on the quality of instructional facilities, availability of these materials in enhancing the UBE. Information gathered from the Centres and from the teachers formed the basis for this write-up. Since, the study is a position and expository research, the literature was facilitated by documents from the WHO, UNICEF, UBE and from the local and Internet materials.

RESULTS AND DISCUSSION

Using audio-visual technology to drive health care initiatives: The television and the video are viable technologies of instruction that can be used to present instruction to the learners in which learners can receive information using dual modalities of sight and sound. The television is an electronic medium, which appeals to the sense organs of seeing and hearing. The on-the-air-television broadcast or television programmes that you watch on the television or monitor constitute the software, while the receiver or the monitor is the hardware.

Much of the knowledge that normal human being acquire is predominantly through the sense organs of sight and hearing. In actual fact, studies have shown that >80% of the knowledge is from the sensory modality of seeing: 11% from that of hearing. The remaining 9% come from the sense of smelling, tasting, touching. If we go by simple statistics above, it means that >90% of knowledge

is acquired through eyes and ears. It is television that captures these two sense organs, hence an audio-visual medium.

Television can enrich the subject matter that is been taught to the learners. For example, if you are teaching blood circulation, it is the television that can vividly show the smooth flow of blood from one part of the heart to the other. No amount of teacher-talk or verbalization can do that.

It is a convenient and economical means of reaching large sections of population. For example, we can use television to teach the entire school using a Close Circuit Television (CCTV). It can provide general education, enrichment and recreation for large audiences. In Nigeria, as well as in other developing countries, people know of what is going on around this world through television devices. Imagine the amount of information we receive through CNN, or Sky way televised programmes (Abolade, 2009).

It capitalizes on dynamism and immediacy. In other words, we know of what is going on in other parts of the world as the events are happening. We hear and see paripassu the events. For an example, if Nigerian athletes are playing football in Japan or Egypt we watch it alive (as they are playing at that time). If a lecture on any topic is lacking place in Pittsburgh, Pa, USA, it is possible through television for Nigerian students to be in a classroom in Nigeria and listen to the same lecture. The Nigerian pupils who are thousands of miles away can even ask questions from the American teacher, through simultaneous telephone. This is called teleconferencing.

It can be used to teach motor skills. In teaching a motor skill, a teacher may have to demonstrate it several times before the learners will be able to master that skill. Imagine that you are teaching physical education skill such as lawn tennis serving or swimming strokes or any other, the teacher needs several demonstrations. Through, the use of the television, these motor skills can be shot once (through video camera) and can be used or watched. It promotes, stimulates and enhances learning. Through, instructional television, the student or the learner is the pivot (primary figure) around which the entire subject matter in the television is revolved.

Some strategies for using television for learning and instruction: Television is a passive teacher. It should not take up a major portion of the learner's day. It is better you use it either as a specialized kind of learning experience, or, as a classroom aid. The length of a lesson should be determined by the age of the students. The younger the students, the shorter the span. TV lessons should vary from 5-10 min at the primary school level and 10-20 min at the secondary school level. TV is best used for lessons in

which TV will offer qualitative and quantitative visual advantages in other words for learning experiences that need a lot of visual sensory experiences.

TV will best-hold pupils' attention when lessons are thoroughly planned. If you, as a teacher, want to use a TV broadcast in your class, you better record the programme in a videotape and use it in class. It must not take the entire class period for that lesson. Pupils should be encouraged to watch a particular TV programme which the teacher feels is useful for some concepts that he is teaching that class. The TV programme can then be discussed in class 1 or 2 days after. The class discussion should be well organized by the teacher (Abolade, 2009). Several research have written favorable and favorable things about the television. What is factual is that the medium is invaluable to learning and instruction if it is judiciously used by a teacher.

Health education poster: a mass literacy strategy on child

health: Educating the masses on health education or health related issues are often difficult because inability of most people to neither read nor write. For the vast majority of people that lives in villages, health education posters could play major roles in educating them on the dangers relating to health problems. People have little medical experience on which to base their learning. They have limited clinical knowledge and in particular their awareness of the value of and the opportunities for health promotion in general practice is limited (Mansfield, 1993).

The problem-oriented literacy campaign method can be employed to educate masses. In this way, posters and other relevant media facilities can be prepared and used to make the health subject interesting and understandable to the people. Both in the rural and the urban area, it is necessary to identify areas of need for health promotion or health education and then to prepare posters, with supportive background and research, to satisfy that need for display in different localities.

CONCLUSION

Children need to be healthy and well-fed before they can maximally benefit from the universal basic education.

RECOMMENDATIONS

The following recommendations are made:

- All efforts to make the Universal Basic Education (UBE) in Nigeria to be a success should be put into place-such as better funding, construction of more classrooms, renovation of dilapidated ones, adequate supply of instructional materials and effective monitoring

- The issue of food supply should be critically looked at. A few states in the Northern Nigeria supply food to the pupils in primary schools. All states should supply a mid-day meal to the pupils. This may be the only opportunity for poor and less privileged children to eat nutritious food
- Nigeria should seriously look into environmental health. The indiscriminate dumping of refuse in the cities should be tackled. Malaria, diarrhea, cholera etc. will remain if the environment is not clean. It may be necessary to bring back the old sanitary inspectors to make people clean their environment
- Children should bring a certificate that they have obtained all necessary vaccinations such as vaccination against measles, tetanus, polio etc. as a prerequisite for admission into the universal basic education class
- Government should continue to partner with UNICEF, WHO, Africare, Global Alliance for Vaccines and Immunization (GA VI) Rotary International and others to put an end to these diseases in Nigeria so that Nigerian children can be in their best health to receive the education planned for them
- Government should embark on aggressive mass literacy campaign, using posters, handbills and other electronic media facilities to educate the people on various health issues. Posters and media contents must be made relevant to people's socio-environmental details

The Eight Millennium Development Goals set by the United Nations in 2000, committed that developing nations should by 2015, meet the developed countries in the area of poverty and hunger, universal primary education, gender equity, child health and survival, maternal health, infectious disease, environmental sustainability and partnership for development. The study has reviewed development goals two and four i.e., universal basic education and child health and survival. It is the opinion of this study that if adequate attention is not paid to the child health, all efforts in giving the same children universal basic education may be a mirage.

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