

Poverty and Children Health Care: Implication for Teaching and Learning of Science and Technology

**Asia Pacific Journal of
Multidisciplinary Research**
Vol. 4 No.4, 92-96
November 2016
P-ISSN 2350-7756
E-ISSN 2350-8442
www.apjmr.com

L.A. Keswet¹, A. E. Bash,² B.A. Kabang³
Department of Science and Technology Education, Faculty of
Education, University of Jos, Nigeria
*lakeswet@yahoo.com¹, asabebash@gmail.com²,
kabangayuba@gmail.com³*

Date Received: August 1, 2016; Date Revised: September 13, 2016

Abstract - *This paper reviewed literature on poverty and children's health care and its implication for teaching and learning of science and technology. It looked at the importance of education and its achievements to the Nigerian citizens. The paper was restricted to the differences seen in the education of the poor children across generations. The paper also identified how poverty and ill health can be destructive to the teaching and learning of science and technology. Poor and healthy children all face a lot of challenges relating to academic success. Some of these challenges could include chronic stress, exposure to lead and other dangerous substances. The importance of science among other things is not only to respond to the needs of the society, but also to be used by all citizens. The study presented some important strategies for reducing poverty and ill health in children by increasing social assistance to poor families, subsidy in housing and more attention to healthcare centers. It suggested among others, that government should sought advice from local, state and federal government and international researchers on how to reduce the menace in the country.*

Keywords: *Children Health Poverty, Teaching and learning, Science, Technology.*

INTRODUCTION

Poverty is the world's current greatest threat to peace and stability more than terrorism and other highly publicized struggles. Poverty remains among the most important human right problem facing the world community. Based on equal worth and dignity of every individual human right is central well-being. Sachs [1] asserted that more than eight million people around the world die every year because they are poor to stay alive. In Nigeria, despite the government poverty eradication campaigns, National Orientation, Non-governmental Organizations, National development plans and sectional paper, poverty is still a major problem to the societies. It is also recognized by all and sundry as a major threat to the very existence of Nigeria as a country. It may not be easy to have a universal definition to poverty. It is viewed from different angles by the society, organizations and other researchers in various dimensions. Sachs [1] also classified poverty into three; namely (1) Extreme poverty, which means the household cannot meet basic needs for survival. Such people are perpetually

hungry, unable to access health care; they lack amenities of safe drinking water and sanitation, they cannot shelter their families, (2) Moderate poverty on the other hand generally refers to condition of life in which basic needs are just barely met and (3) Relative poverty is construed as a household income level below a given proportion of average national income. Many Nigerians are living below the poverty level, they live in poverty in its extreme nature manifesting itself in terms of lack of basic standards of health, nutrition, shelter, water and sanitations and other minimum need for survival well-being and participation in the society. The poor are not single group with only a single problem of lack of money, but poverty has many dimensions –shortened lives, increase illiteracy, social exclusion among peers and the society, and lack of material means to improve family circumstances. Furthermore, these dimensions can overlap in different combinations where for example, men, women, children or adolescence view poverty differently. For example as in urban area

,when food stuffs are yet to be harvested and brought to the market, the poor finds it costly to buy food for their families, while in the rural area, lean periods and low income availability coincide with periods of endemic diseases. Seasonal rain also destroys rural road and physically isolate the poor from markets, hospitals and other essential services

Similarly, poverty sometimes is structural. It systematically excludes a portion of the population from the full national and social participation through hunger, inadequate income powerlessness, poor education and diseases. For example, if a parent is poor, the chances of the children becoming rich are limited. The poor parent may not have landed property, money, or any valuable thing to sale and educate their children and solve health issues. It is on this note that this paper seeks to present discussion on poverty, health care and its implication to teaching and learning of science and technology.

EDUCATION AND POVERTY

Education is the backbone of growth and development of both young and old in the whole nation. However its achievement continues to elude many Nigerian citizens who are poverty stricken. This has perpetuated the vicious circle of poverty so much that the gap between the rich and the poor children has kept on widening as extreme poor are denied access to education. Poverty limits the chances of educational attainment, and at the same time, educational attainment is one of the prime mechanisms for escaping poverty. Equally, access to quality education among some of the poor has constantly been affected by poverty. Some poor children's access education that is marred by lack of right instructional teaching facilities, structures, and poor processes of teaching delivery, exposure to unhealthy living and attractive learning environment. The issue of poverty dominates the social life of the society and it affects the teaching and learning of science and technology through school children. The deceptive nature of poverty is seen in its intergenerational perseverance that is passed from parents to children sometimes as an uninterrupted and burdensome inheritance. Once viewed as a borderline condition in society, the rise and spread of unemployment, mortgage losses and bankruptcies requires a pattern shift in how poverty is viewed ,who impacted ,and what means for families especially children of school age [2].

POVERTY AND HEALTH OF CHILDREN

Poverty and health care difference in children have profound effects on the life children globally historically; poverty has been the major determinant of children and even adult health. Poverty in children exerts its effects throughout life course and be transmitted across generations. Poor children are likely to much more to be taken in care all its major implications for child health care. It is estimated that a child from a poor background receives little or no benefit of quality education and health care because the attention of these types of children are being diverted to issue ill health and unbalance food materials. In the same manner, poverty can lead to nutritional imbalance, the intake of vitamins, minerals a dietary fiber and consumption of vegetables and fruits are much lower since some of these fruits are not easy to come by as their income are low and consumption of white bread, processed meat and sugar are high and in some cases all sources protein are absent in the proper households compared to those that are affluent (Spencer, 2000).

Children are regarded as a group of person which not fully and physically developed; child could be a boy or girl. To many psychologies, a child is any person between 0-13 years of age who has not fully developed or matured. Different theories both psychological and social have postulated on the area of child education, the most famous one, is that of Piaget cognitive development theory of younger children differ in significant ways from the thinking of older people [3].

Parents and teachers should take into consideration a child's level of cognitive development in terms teaching and training Busari [2011]. Piaget in his stages of cognitive development from sensory motor to formal operation stages assists m child to engage in imitating the mental images he has developed, while, serving others. He further states that, it also helps the child to develop more complex forms of thinking as he strives to reflect upon the way things behave as he interacts with them and stimulator of social learning as the child what is acceptable and not acceptable to the people with whom he is interesting with [3].

The implication of this theory to the teaching and learning among science children includes; teacher should encourage the following in the classroom; Focus on the process of teaching and learning rather than the end product, using collaborative, as

individual activities. So that children can learn from one another especially for the sciences, devising situations that present useful problems, and create disequilibrium in the child, evaluate the level of the child's development, so that suitable task can be set, provide social situations where the poor and unhealthy will participate fully because social illness or injuries can downsize the entire family or house hold. The effect may divert time from generating income, schooling, the ill health may require sale of assets and food main for the household.

IMPLICATION FOR TEACHING AND LEARNING OF SCIENCE AND TECHNOLOGY

Educators already know a multiplicity of theories of teaching and learning. This health of knowledge must be translated into actions that make a difference in the lives of all children including those living in poverty and having unhealthy live. A paradigm refutes pathological view of poverty as a disability is essential. Therefore, Science must not only respond to the need of society in order to improve the quality of lives in poverty, it should also be used by all citizens, children, men and women. To be usable scientific advances have to be known and owned. It will be regretted if the importance and impact of science is not felt as a result of poverty and ill health. One of the most perverse ingredients of poverty is ignorance i.e. lack of understanding, that is where basic principles of science remain unknown, where people grow without the ability to read and write where lack the appropriate vocabulary to address their longing and desires where they are deprived of the ability to learn for themselves what they need to resolve their problems [4]

In this 21st century, science must become a good shared by all the poor and non-poor children and for the benefit of all people. It is science that will combat the ignorance of the poor ,deal with scientific principle through an application where children are taught and learn from teachers how to read and talk about science, argue for their views of the world and how they can draw on this knowledge to help in decision –making. Children need access to the necessity of life in a world where there is more than enough for everybody .The need also access to ways in which they can expand freedoms they expected to take advantage of such opportunities, and so become more human. This study presents the implication of teaching and learning to children who are having health problem.

Thus, science teaching and learning has to be seen as necessary for the full realization of human being especially at the younger age. When the majority of populations of children are scientifically illiterate, it will not only aggravate in equity, but also presupposes the exclusion of extreme true participation in poverty and health care. A quality science and technology teaching and learning is to contribute to developing ways of thinking. Many scientific ideas are counter intuition as we know from many investigations. Pozo [5] has shown in variety of ways that thinking scientifically helps develop new ways of doing and thinking, it will widens and deepens our capacities of thinking. Thinking about and with scientific observation s ideas means we have to think in new ways that offers powerful possibilities for the future, and are not often spontaneously available without teaching and learning.

Science and technology would also open the possibility for more and more citizens to experience the joys and delights of education Inuwa [6] maintained that for any programme to achieve its goal being it teaching or learning there should be wide range of coverage of the participant i.e. the child. Nigerian child suffers high poverty level; who mostly suffers lack of access to information and good roads school facilities, social amenities, and qualified teachers whereas the teaching and learning globally is computer based where the poor child may not have access to the computer.

According to Inuwa [7], these factors militate against the success of teaching and learning of science and technology. To support his claim, he confirmed that apathy and parental poverty also affect the process teaching and learning of science and technology as it determined those that attend school, how long to stay in school as well as chances of completing the school or not ,unhealthy and less privileges suffers suffer from school attendance for example, late coming, truancy as a result of lack of school material, trekking, Omotayo [8] considered the following factors affect the performance of young children in science, Parents relationship, and domestic work such as hawking which is found among most parents that are poor in education, emotional attainment, and health challenges and so on. It is seen that Nigerian children are unfortunately found in the poor and unhealthy situation as a result of poverty and kept at home on market days or on health basis and after school hours to hawk around, these children have

the little or no time to go through school books or assignment, while science and technology is demanding of time and attention.

Many children that are poor and having health care problem do not have the opportunity of being in school throughout the school days. It is regrettable to state the children that are poor or having health care problem end up as school drop-outs or receive poor quality education because of the low attendance due to lack of school materials or having health care problem. Those children who are poor missed the opportunity of going to school always have missed a vital tool of education as means of preparing meaningfully and the society at large. Again it is reasonably to state that those children who manage to finish their school under duress of poverty and health care problem end up with poor foundations which do not prepare them well for further learning for effective service in the society.

STRATEGIES FOR REDUCING POVERTY THROUGH HEALTH CARE

The government should be serious about reducing child poverty, undertook a careful analysis of the available evidence, and examined the efforts of various governments to reduce child poverty. Sought advice from local state and international researchers and under look detailed consultation with the public.

Employment rate be boosted ;the aim is to create more job opportunities by boosting economic growth and the beneficiaries should be encouraged into responsible paid work, but such a strategy has limitations: It provides no additional assistance for children whose parents are largely dependent on social assistance for long period of time; and it is unlikely to bring quick relief to many who are currently in poverty and having health challenges even though they in non-households (i.e their parents , although in paid employment , are on low wages)

Another main option is to increase the level social assistance to families, increase housing subsidies; more extensive health care will be well equipped with facilities including drugs. An income support programs which can increase economic resources reducing parental stress, where by boost children achievement in schools.

The government should be a monitoring team responsible for seeing the progress of reducing children poverty.

Parents should be enlightened on the danger poverty on their children education, through awareness campaign, workshops and seminars.

The relevant government agencies in charge of welfare should pay much attention to the issue of poverty in order to boost the health and education of the poor.

Families should be supplemented with incomes to encourage them to engage in activities have potential to promote children's well-being.

Teaching is one the most demanding professions. It is particularly in school settings. Teaching and learning have undergone shift with changing time .This shift embrace new methods and techniques to make teaching and learning more rewarding, worthwhile, beneficial and more meaningful to both the teacher and learner. Damar [9] sees teaching as a process of making it possible for someone to learn. It then means that learning cannot be said to have taken place unless there is a result of some effort referred to as teaching.

Learning is a lasting change in behavior that results from experience .Learning becomes a major focus in psychology during the early part of twentieth century as behaviourism. Modern research has demonstrated that the brain continues to create new neural pathways and after existing ones in order to adapt to new experiences. New brain memory is created every time you form a memory. Kendra [10] Learning cannot take place if there is no change in action, behavior or way of doing things. Damar [9] sees learning as committing something to memory or receiving instructions. She further observed that learning is relative permanent change in behavior, resulting from activity, training or observation.

CONCLUSION

The challenge presented to education in Nigerian schools is to find a way of reducing poverty and ill health in children on teaching and learning of science and technology. In line with the discussion above, it seems obvious that education has a vital role in children aimed at advancing their knowledge. The government should as a matter of urgency tackle this issue of poverty and ill-health of children. The failure to tackle this issues, presently as seen in most of our children today is a dent on country's image and integrity. Urgent steps should therefore be taken not only to achieve the aim of education but to protect and

preserve the lives Nigerian children so that the nation can be sure of tomorrow.

SUGGESTIONS

The government should be serious about reducing child poverty, undertake a careful analysis of the evidence, and examine the efforts of various governments to reduce poverty in children, sought advice from local, state and federal and international researchers and under look detail consultation with the public. Employment rate be boosted, the aim is to create more job opportunities [by boosting growth] and the beneficiaries should be encouraged into responsible paid work. But such a strategy has limitations. It provides no additional assistance for children who are largely dependent on social assistance for long period of time, and it is unlikely to bring quick relief, many who are currently living in poverty and health problem even though they are non-beneficiary households [I.e. their parents, although paid for employment or on low wages].

Another main option is to increase level of assistance to families, housing subsidies; more extensive primary health care that will be well equipped with facilities including drugs. An income support programs which can increase family income in an effort to increase economic resource reducing parental stress whereby boost children achievement in school.

Many children go without health care, especially preventive care either because they lack care monetary or health wise .The probability for a poor child in a year is more than twice that for a child in a wealthy household. A host of recent studies shows that growing up in poverty can shape the wiring and even the physical dimensions of a young child's brain, with negative effects on language learning and attention. Parents and care givers can have a constructive impact just and doing what they have to build a sense of security which this can serve as drugs to the ill health and poverty level. The poor and unhealthy children faced a host of challenges to academic success. These challenges fall into two broad categories. First, as one might expect wealthier or non-poor parents have resources to provide more and better learning opportunities for their children. Secondly, children from poorer homes are subject to chronic stress, which researches have shown that it is more destructive to

learning than any physical violence. Children that their parents have no knowledge of their development, life style and how they learn in schools are likely to have problem of health care. Children that are having health care problem stand the risk exposing themselves to physical development; they are more likely to live in substandard houses with greater exposure to lead, and subsequently show higher blood lead levels than non-poor.

REFERENCES

- [1] Sachs. J. D. (2009). *The end of poverty; Economic possibilities of our time*. New York: The penguin press.
- [2] Murphy, A. (2010). *The symbolic dilemmas of suburban poverty: Challenges and opportunities posed by variations in the contours of suburban poverty* sociological forum: 2010 25 (3), p 541 – 569.
- [3] Isah, A. M. (2004). *Parental attitudes towards cognitive development of children among the Hausa*. In Muhammed, U. T, Salawu, A. AS. Ardo, G. V. and Dukku, M. G. (ed) *Educational themes in Nigeria*; Kaduna: Nasara press Ltd.
- [4] Savater, F. *El Valor de Educar (The value of educating)* Barcelona Editorial, 2004.
- [5] Pozo, J.I. *Aprendices y maestros, [Learners and Teachers]* Madrid, Alianza, 2008
- [6] Inuwa, A. M. (2009). *Challenges and prospects of sustaining foundation education in Nigeria*, Sokoto Educational Review, 11 (1), 179 – 182.
- [7] Inuwa (2008). *Parental attitude towards girl education at primary school level in Gwadabawa local government area of Sokoto State*, M.Ed. Dissertation of Udu Sokoto.
- [8] Omotayo, O. T. (2009). *Influence of family size and after school activities on students' academic performance in Surulere and Kosofe local government area of Lagos state*, sokoto Educational Review, 11(1) 280 – 296.
- [9] Damar, D. N. (2004). *The Making of a Geography Teacher*, Jos: Deka publications.
- [10] Kendra C. (2013). *Thinking learning style*

COPYRIGHTS

Copyright of this article is retained by the author/s, with first publication rights granted to APJMR. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4>).