

**THE EFFECT OF CLIMATE CHANGE ON THE ELDERLY
POPULATION; ROLES OF SOCIAL WORK: A STUDY OF UNIVERSITY
OF NIGERIA, NSUKKA**

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ABSTRACT

Older persons in every population are usually considered vulnerable and dependent on significant others for support. Their vulnerability and dependency attributed to them, make them susceptible to harm easily. Elderly persons are faced with numerous crises ranging from issues of neglect to abuse. However, for the purpose of the topic under discussion, climate change as among the problems they face happen to be the focus. Climate change as an ecological phenomenon implies distortion in the eco-system and atmospheric concentrations that are of serious threats to human habitability. The concept of climate change could be seen around in terms of recent happenings such as flooding, excessive scorching of the sun, heavy down pour of rain and among others. It is to the up rise of these threats to human existence that human habitability now follows a “survival of the fittest” stance. Hence, vulnerable population are very much considered on the bases of limited coping capacity and mechanism which they possess. Inevitably, the vulnerable older population have little or no coping mechanism to face the threats climate change abet. Hence, it is at this disequilibrium, that social work becomes a great resort in restoring equilibrium in everyday living of the elderly population.

KEY CONCEPT

Climate change, elderly population, vulnerable, green house effects, global warming

INTRODUCTION

Climate change as a problem and a threat to human existence has its roots owing to a variation of certain ecological problems. It is an ecological phenomenon that produces its effects on the social, cultural, physical and economic state of people. Climate change and its effects are antithetical to positive components of the ecosystem and the atmosphere. To this end, the term cannot just be defined without explanations to enhance knowledge. In the works of Filiberto, Wells, Wethington, Pillemer & Wysocki (undated), the earth's global mean climate is determined by incoming energy from the sun and by the properties (reflection, absorption and emission of energy) of the earth and its atmosphere. Changes in the earth's global climate result from factors such as the dynamic processes of the earth (volcanoes); external forces (solar radiation) and human activities (emission of greenhouse gases, land use). The emission of greenhouse gases especially Carbon dioxide (CO₂), Methane (CH₄) and Nitrous Oxide (N₂O) (Bennet. A, 2010) by human activities pose serious hazardous effects on the composition of the atmosphere. The use of lands via falling of trees and plants also brings about harmful effect on the climate. Hence, human activities to a great extent precipitates other antecedent issues resulting to climate change. The threat of climate change has the potential to cause large scale drought, increased incidence of disease, shortages of water and food, rising sea levels and increased extreme weather events (Inter-governmental Panel on Climate Change [IPCC], 2007). Climate change could as well imply global warming or greenhouse effect. The question of climate change happens to be global and respects no national boundary. Its global attribute

and its effects on everyone all over the globe has attributed to it the status quo of a social problem seeking redress. Environmental concerns on climate change are now influencing government policies at both national and international levels. According to Olaolu(2005) climate change refers to a change in climate that is attributable directly or indirectly to human activities that alter the atmosphere composition of the earth which leads to global warming. He further said that it has the potential of affecting all natural and human systems and may be a threat to human development and survival social, politically and economically.

From the forego it is in the context of survival that vulnerable population are usually looked at. Among the vulnerable population are the elderly persons. The report of the 2010 Stockholm Environment Institute in Haq et al (2010), categorized people over 50's as older persons. The categories are -:

- (a) baby boomers (50-64)
- (b) seniors (65-74)
- (c) elders (75+)

It is based on the age brackets above that this paper looks at the effects of climate change. Older people may be physically, financially and emotionally less or none resilient in coping with the effects of a changing climate than the rest of the population (Haq et al, 2008). They are more at risk from climate related threats due to their poor coping state. Deteriorating health that comes with age makes them even more prone to the threats of climate change. As a result of this, people in this class become very much susceptible to harmful conditions emanating from the effects of climate change. Sometimes terminal illness sets in which could lead to death and other variations of ill situations of either physiological, social or psychological circumstance. Therefore, factors such as income, education, social support network and access to credible social services will determine how well an

individual will cope with climate related challenges (Haq et al, 2008). Amidst the absence of the above, the profession of social work as a problem solving discipline will be of help in ameliorating or eradicating the challenges and obstructions to the wellbeing of the elderly people.

CAUSES OF CLIMATE CHANGE

Climate change has its advent owing to human actions and in particular from the burning of fossil fuels and dynamics in global patterns of land use. However, there are number of causative factors responsible for climate change. There are natural and man-made causes precipitating change in the earth's climate. According to Olaolu. Y (2005), he posited that natural factors leading to climate change include -:continental drift, volcanoes, ocean currents, the earth's tilt, comets and meteorites that manifest in certain processes such as solar radiation, deviation in the earth's orbit, mountain building and changes in greenhouse concentrations. More so, in the works of Olaolu. Y (2005), he stated that human causes have been influenced by the advent of the industrial revolution of the 19th century, which saw the large scale use of fossil fuels for industrial activities. Human activities are made to consume extensively certain natural resources to successfully meet their desired ends of social, physical and economical purposes. Such resources are used for constructions, production of industrial commodities and among others. A great deal of human activities have contributed to constant rise in greenhouse gases in the atmosphere. Fossil fuels such as oil, coal and natural gas supply most of the energy needed to run vehicles and for power generation in industries, households etc.(Olaolu. Y, 2005). The abysmal usage of lands by humans for construction of structures and facilities have rendered the greens to extinction. Hence, the carbon cycles, photosynthesis and other conjugal

ecological processes become interrupted. Therefore, climate change inadvertently becomes a reality.

CHALLENGES FACED BY THE ELDELY IN CLIMATE CHANGE CONTEXT

The elderly people happen to be the fastest growing population all across the world (Megret, 2011). This is due to certain experiences such as: - birth cohort experienced during the period of birth of the present elderly population, increased health care facilities, family planning programmes, legislations regulating child birth and among others. It is therefore an obvious scene that in this period of climate change, the elderly population is of no doubt pervasive. However, the frailty of the elderly has placed them in a vulnerable state to the effects of climate change. Most of them are particularly vulnerable to climate change while on the other hand, climate change has brought about greater vulnerability to them. This was clearly supported in the works of Filiberto et al (2010, pp. 19-25) as they stated that while aging itself or turning age 65 does not make a people vulnerable, socio-cultural elements as well as physiological conditions exacerbated by the negative impacts of climate change create greater vulnerability. The adverse consequences of climate change create a complex social situation contributing to distracting economies, abolishing livelihoods, undermining development and exacerbating discriminations between the sexes (UN Population Fund, 2009).

Nonetheless, challenges the elderly population witness in the presence of climate change are quite numerous. Hence, the following could be a few out of the numerous challenges they face.

(i) Health related challenges

Temperature rise causes significant higher mortality risk of the elderly (Costello and Abbas et al, 2009). Extreme cold and longer wet environment result

to hypothermia, bronchitis, pneumonia among elderly (Guide on Climate Change & Indigenous Peoples, 2009). The advent of reduced gastric acid population, changes in respiratory function, decline in blood flow and pulmonary excretion, neurological degeneration become pervasive in old age. Climate change accelerates these functional changes affecting particularly the elderly (Geller & Zenick, 2005). More so, extreme rainfall, flooding, excessive heat or rise in sea level could affect the cultivation of crops by the elderly who might have lost their younger population to rural-urban migration and might lack the necessary adept to make alternative means for food production and consumption. Hence, their health gets affected due to poor nutrition. More so, air pollution could result to furriation of arteries in older persons especially in industrial areas (Kate. W et al, 2008).

(ii) Socio-cultural challenges

The elderly people most times depend on their cultural activities for leisure. But with the advent of climate change, they are deprived of certain cultural activities which might be as a result of excessive rainfall, heat, erosion among others. More so, climate change has driven certain cultural elements into extinction such as plants, rocks etc. Before the advent of climate change, the elderly population could make use of traditional knowledge in predicting weather and climate outcomes. But the case is no longer the same today, hence, the knowledge of the elderly with respect to climatology are no longer respected by the younger populace. In the face of climate change disasters, old persons are usually affected due to lesser mobility. For instance, seventy-four percent of the deaths related to Hurricane Katrina were people aged 65 and above (Hyeretae, 2008).

(iii) Economic challenges

Economically, the older people face increased insecurity bringing about change to their property, land, livestock, crops and livelihood (Help Age briefing,

2000). All these they face as a result of experienced drought, high rainfall, flooding among others. Also, the fact that they could no longer predict the weather has contributed to their poor economic experience. More so, it becomes more economic challenging for the older population who most times are left with their children and grandchildren to cater for whilst the middle aged population go seeking for livelihood in urban areas. Sometimes they get little or no support from them

(iv) All the above categorized challenges tend to affect the older population psychologically. This can be made manifest in certain psychological malfunctions such as anxiety, depression, insomnia, mood swings, bi-polar defects etc. Thus, if these psychological deficiencies are not properly managed, physiological disorders could set in and might finally lead to death.

STUDY SETTING

The study setting is the University of Nigeria, Nsukka campus. According to history, it was founded in 1960 and happens to be the 1st indigenous university of the country. It is located in South – East Nigeria precisely in Enugu state. The campus has about nine faculties made up of different departments. Some of the faculties include: Arts, Social Sciences, Education, Physical Sciences, Agriculture, Veterinary Medicine, Pharmacy, Engineering and Biological Sciences. The older population present in the study setting could be among the academic and non-academic staff; post-graduate students, some undergraduates and other persons within the school environs.

STUDY METHODOLOGY

Design of study

Sample survey research design through was used for the study because of its

advantageous position in focusing on the make up of a sample at one point in time that could enable a researcher to scientifically draw inference from the study of the sample and make generalizations. More so, it is time saving and cost effective.

Population of the study

The elderly populace in University of Nigeria, Nsukka is the targeted population of study. However, a precise figure for the population cannot for reasons be made available.

Sample size/Sampling technique

For effective study, a sample size of 6 elderly persons of the population was drawn. In drawing the sample from the population, the convenience sampling methodology also known as availability sampling which is a non- probability sampling technique was used. It was used because of the short frame of time given to carry out the study.

Method of data collection

Data were collected qualitatively. The collection was specifically made through interviews of older persons that were available for the study. Questions used during the interviews were structured and open ended.

DATA ANALYSIS

Data was analyzed using thematic analysis to analyze the themes and sub-themes. Hence, it was strictly a qualitative analysis.

RESULTS OF THE STUDY

Following the interviews, the results of the study served as a pointer to the following :-

(i) Knowledge of the term climate change was obtainable from the literate elderly. They actually understood the term and could tell what it was using recent

climate related happenings. On the other hand, few of the elderly that were not very literate did not however understand the term climate change but were aware of the fact that what used to be the features of our weather and climate are no longer obtainable. They made mention of extreme conditions of heat, cold and rainfall that result in flooding of some areas. Some of them who are privileged enough to understand media reports mentioned occurrences such as earthquakes, hurricane disasters, high current flooding to mention but a few, as events that were not very much witnessed in their childhood and earlier years.

Question

Sir, do you have a knowledge of the recent change in the world's climate which we generally refer to as climate change? This question was asked to a man of above 60 years who is a Phd holder in chemistry.

Response

“Everyone existing on earth that was born in my time should be aware that the climate we had when we were young is not same with what is obtainable in recent times. Today, the weather usually get to the extreme when hot or when cold especially in Nsukka here. So much rainfall and over flowing of water bodies out their banks. In fact the recent flooding in the country of Delta, Rivers, Lagos states and among others should say more of the existence of climate change”

(ii)The interviewees for this study made assertions to the fact of age as a yardstick for measuring the concept of old age. A great deal of them are of the opinion that once a person starts approaching the age of 55-60, old age is setting in. They actually gave certain symptoms depicting old age such as:- weakness of bones especially weight bearing joints, memory loss, accumulation of knowledge in the form of wisdom, difficulty in digestion, degeneration of speech organs and neurons and many more. A good number of them were of the opinion that the

acceptance of old age greatly depends on the extent to which life has been fulfilled. However, most of them were not comfortable being addressed as old.

Question

Sir, what does someone means when he says that a person is old and do you think you are actually old? This question was asked to a man who is in his early 60's. A non-academic staff of UNN who works at Lion Table Water.

Response

He laughs and proceeds- *“old age comes with age. In our culture, once a person approaches age 50, he is regarded as an elder and that implies that he is becoming old. When a person starts getting old, there are signs in the body that tells him or her that he is running age. For instance, I normally get weak even when I do certain little jobs that should not just get me weak. There are foods I don't eat again, I sometimes forget things easily and my children laugh at me because of that. I accept that I am old because I have fulfilled life. So many persons run to me for advice and emulation. Nonetheless, don't tell that I am old because I know how physically fit I am. He laughs again”*

(iii) The effect of climate change on the elderly in the course of this study were mostly negative. They complained of health related implications which included mostly pneumonia and other cold related illnesses; in times of excessive heat they suffer suffocation and some of them said that when they decide to make use of electric powered fans and air conditions, they could get cold. For some with medical advices, they have been told to stay away from cooling devices, foods and water. So, they are faced with a dilemma in situations as stated above. Some of the respondents said that they sometimes would love to perspire and get themselves engaged in activities but they still don't get to perspire. The fact of issues of agriculture for some who had subsistent and a bit commercial farmlands centred on

their difficulty in predicting the weather. Hence, if a heavy rainfall comes when not expected, they might lose their crops to flooding. They further said that incidence of such could get them depressed. Thus, affecting them both psychologically and economically.

On the other hand, for few of the elderly who had stayed in cold regions, they appreciated the cold obtainable in Nsukka and had a strong disgust for the heat periods. The elderly who had farmlands and may be children or grandchildren appreciated the fact that the unpredictable nature of the weather has caused the younger ones to be hardworking in the course of planting, checking regularly on planted crops and harvesting as immediate as possible.

Question

Sir have you actually been affected by climate change? This question was asked to all respondents who gave relative answers as summarized above but particularly the above 60year old Dr of chemistry did justice to the question.

Response

“There are health related issues that have come with climate change affecting not just older persons but even the young ones who are our children. Pneumonia and other cold related diseases, suffocation, heat rashes and other heat instigated diseases are common now. We spend money on the health of ourselves and children. Our parents and other older persons in the village complain of difficulty in predicting the weather which do have effects on their farmlands and proceeds. I am even affected because I do have a little farm behind my house. On such occasions I usually get vexed and so I know those that might not have something doing like me will definitely be more vexed. For some of us who have been medically warn not to take cold foods or drinks or even stay under air conditions and fans, it is worse for us during heat periods. The weather in Nsukka

is not very good for me but I love it a times when it is cold because at our age, our body tends to be often times warm or hot even when people around feel cold. It sounds funny”

(iv) The use of good drainage systems, laws prohibiting arbitrary burning of bushes and seminars, symposiums and conferences organized for the awareness and mitigation of the effects of climate change, were governmental efforts some of the literate elderly attested to. Hence, they said it was not enough since the life of an average elderly in most rural areas and hinter regions is not touched by any of the governmental measures. The literate elderly were of the view of making use of technological appliances to mitigate the effects of climate change. Generally all said that nature can be hardly fought against. Therefore, they just need to see and accept it the way it comes and do the little they can so as to live for more years for their children and grandchildren. They also said that the younger generation should try to be of help to them since their strength alone could hardly carry them.

Question

Is the government of help in the face of climate change? This was asked to all respondents who gave related answers as summarized above. Hence, a senior lecturer of the department of Vocational Teachers Education responded as stated below.

Response

“It is the responsibility of every government to cater for its citizens. To an extent, the Nigerian government has been of help. They make drainages and ensure through certain sanitation policies that members of the society make sure that they are kept clean and cleared. Symposiums, seminars and media reports are being organized through governmental agencies, universities and media stations, centering on climate change. Although these strategies are commendable but what

about those in the hinter rural areas? Nonetheless, nature cannot be easily fought with. So, everyone just need make his or her own coping mechanism to ensure longevity and not solely depend on the government”

(v) Social work as a profession was mainly known by three of the literate elderly. They actually made their statements from a comparative view point with what they felt and know was obtainable in advanced societies. “Some made mention of influencing policies on greenhouse gases emission, environmental arrangements, eradicating stereotypes of the elderly, elderly abuse, credible support systems and relief materials to those affected negatively by climate change and among others”. More so, some who feel depressed and having other mental health issues often time need someone to talk to but find none. Especially those whose children are out seeking greener pastures. So, they advocated for the initiation of social work centres and psychological clinics were they could obtain a helper in times of their conflicts. One of the interviewees, particularly the PhD holder in chemistry who is above 60, was of the opinion that the government should make the provision of community help centres so that access to social supports and workers would be made to the grass root.

DISCUSSION OF FINDINGS AND IMPLICATIONS FOR SOCIAL WORKERS

Generally the findings stood to show that the frailty of older persons has made them more vulnerable to the negative effects of climate change. In assertion to this, Kelly and Adger (2000) implied vulnerability to be “that the capacity of individuals and social groups to respond and adapt to an external stressor is challenged”. Thus, climate change happens to be an external stressor based on results of the findings, and indeed, the capacity of older persons, also according to the findings are been seriously challenged. Therefore, there is the need for an

equilibrium so as to enhance the coping capacity of the elderly. In striking this equilibrium, a profession that is charged with the responsibility of enhancing and restoring the coping capacity of individuals, groups or communities, so as to bring them to a desired and optimum social functioning is dearly needed. That profession is the “social work profession”. According to the findings, few of the elderly population suggested crucial roles needing social work attention. In addition to their views, there are more implications of the study to social work roles. This of social work according to Lorenzoni et al (2007) in Boddy Jennifer (2012) has been tagged “eco-social work practice framework”. Social work profession champions or promotes the protection of the natural environment as inherent to social wellbeing. The International Federation of Social Workers (2004) posited that social workers should be concerned with the whole person, within the family, community, societal and natural environments. Environmental justice should serve as one of the sub-values of our core value of “Social Justice” via maintenance of human rights. Hence, social workers have veritable and crucial roles to play in the face of climate change as many as one in five people will suffer the debilitating effects of extreme stress, emotional injury and despair (Boddy. J, 2012). Furthermore, she asserted that eco social work argues that human welfare and wellbeing cannot be separated from nature and the health of the earth. Therefore, in salvaging the interest of the elderly population in the face of climate change, Dan Morton and Rich Moth (2009) have mirrored social work actions into: -

- (i) Taking actions to limit the extent of climate change (mitigation)
- (ii) Preparing for life as the world around us changes (adaptation)

CONCLUSION

The vulnerability of older persons poses them to lot of situational harms and conflicts and one of which is climate change. Their frailty and degeneration in their

physiological, psychological and social components has led so many into a lack of voice on social and ecological happenings. The lacuna created needed to be filled up so as to provide for them credible responses against their backdrop. Social work is the right profession to stand in that lacuna and offer a voice to older citizens so as to enable mitigation or adaptation to the effects of climate change. Therefore, this study has provided justice to the impacts of climate change on the older population in University of Nigeria, Nsukka and as well the roles of social work. Nonetheless, the study could apply as a means of comparative analysis to other areas.

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APPENDIX

A guide to questions used during the interview include:
 appendix 1. Assessment of knowledge of climate change
 appendix 2. Assessment of self-understanding of the concept of being old
 appendix 3. An understanding of how climate change, positively or negatively has affected him or her
 appendix 4. An understanding of governmental or self-measures to mitigate the effects of climate change.
 appendix 5. If he/she feels social work has crucial roles to play in the face of climate change.

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