IMPACT OF FLOODING ON FAMILIES IN NIGERIA: RESPONSIBILITIES OF COUNSELLING

BY
ONYIJE, ALLEN CHUKWUMELA, Ph.D
onyijeallenc@yahoo.com
08037731611
BRIGHT UZOR ELEBERI (Ph.D)
eleberibright@yahoo.com
0806432667
&
VIVIAN FUBARA GBOBO, Ph.D
Viviangbobo846@gmail.com
08037086902
Department of Educational Psychology, Guidance and Counselling, School of Education, Federal College of Education (Technical) Omoku, Rivers State, Nigeria

Abstract

The study investigated the impact of flooding on families/ parents in Ogba/EgAbema/Ndoni Local Government Area in Rivers State. The study adopted survey research design and was guided by three research questions and hypotheses. A population of seven hundred families/parents were used for the study, while a sample of three hundred parents/families were drawn through purposive sampling technique for the study. Each of the ethnic groups that constituted the local government area was sampled as follows: Omoku town 80, Egbema 40, Ndoni 30, Egi 50, Usomini 50 and Igburu, 50. The instrument for data collection was a structured questionnaire prepared by the researchers and titled: 'Impact of Flooding on Families/Parents Questionnaire' with four sections. The instrument was validated by experts in Measurement and Evaluation and in Guidance and Counselling. Pearson Product Moment Correlation was used to test the reliability coefficient at 0.05 alpha level of significant. Mean and standard deviation were used to answer the research questions and t-test statistics was used to test the hypotheses.

Keywords: Flooding, Families, Counselling, Emotion, Devastation

Introduction

There are several cases of natural disasters in the world today such as earthquakes, cyclone, heat and cold waves, fire, epidemic, civil strife and above all flooding. Flooding, out of all these natural disasters, becomes the most, frequent in this recent time. Researchers have acknowledged and estimated flooding as the most damaging climate related hazard in the world today.

Apparently, flooding is the overflow of water from the water bodies, such as the river, lake or excessive rain, ocean in collapsed damaged snowmelt and climate change which the water overtops or breaks levees, resulting in some of that water escaping its usual boundaries and cause damages to homes and families, business centers and other facilities if they are established in the natural flood plains of the river. Some floods occur abruptly and recede quickly whereas others take several days or months to form and to recede because of water variations in size and duration (Adeloye & Rustum, 2016). According to Baddiley (2018), floods are problems when the magnitude and impacts of their occurrences are levee-embankment and unvaried in frequency and ability to affect communities. This therefore becomes a disaster when it leads to a serious disruption of the functioning of a community or family or society causing widespread human, natural economic and or environmental losses (Jonkman & Kelman, 2019).

Clearly, flood has the capability of causing widespread devastation, resulting in loss of life and damages to personal property and critical public health infrastructures and other valuable belongings. Between, 2012-2022, flood affected more than two billion people worldwide. People who live in floodplains and those who lack warning systems and awareness of flooding hazard, are most vulnerable to flooding. The immediate impacts of flooding include destruction of crops, livestocks, human lives, a change of land areas and deterioration of health conditions enabled by water bone diseases.

In 2012 and 2022, Nigeria experienced her worst flooding recorded in recent history where total lose estimates was valued at USS 16.9 billion. Estimating the total loss experienced during the two consecutive floods, Isidore, Aljunid, Kamigaki, Hammad and Oshirani (2018) estimated them to have caused a huge loss that cannot be quantified hence the actual figures of displacements and fatalities truly cannot be ascertained.

Effect of Flooding on Families and Family Life

Specifically, International Federation of Red Cross Society (2012) opines that flood had traumatic effects on the victims and their families for long period of time. The loss of loved one's especially children has deep impact on their owners. Many families and members were displaced, loss of property and disruption to businesses and other sources of livelihood and social life can generate continued stress. The negative impact of flooding affects structures such as bridges, roads, human toll, devastation of useful areas and other such valuable effects. Structures such as nuclear power plants which sustain live of people and also reader assistance to livelihood were put at risk and to the detriment of the users. Psychologically, victims experienced symptoms of post-traumatic stress disorder, depression and anxiety. Children were the worst hit as they were unable to fend for themselves, sustained high risk of injuries, shock due to chaos, noise and panic caused by the disaster, seeing their loved ones drowning or getting injured, losing their belongings, damages to their homes, having to live with hunger and thirst, separation from siblings, parents, homes and fear were some of the recalling incidents that could form more traumatic influence on the people and environments.

Psychological/Emotional Influence

Definitely, families affected by flood have experienced a range of emotion arising from anxiety, fear, anger, frustration, sadness, grief and separation. It is natural for people who experienced disaster like flooding to develop experiences of difficulties in insomnia, loss of appetite, depression, anger and heightened feelings of obsession. Often times, mental health professionals were made available by experts from National and International organisations for planning disaster response such as the National Emergency Management Agency (NEMA) or the American Red Cross Society to attend to the psychosocial needs of flood victims to ensure that they receive timely basic needs and trained to watch for signs of distress arising from the ugly situation (NEMA, 2018).

Effect of Flooding on School and Learning

Flooding does not only destroy businesses, lives, farms and families but also has adverse effects on the school system. The school children/students were the most vulnerable during flooding. When it occurs, it damages school infrastructures such as library, classrooms, administrative facilities, water supply and toilet systems of our academic institutions thereby denying the students conveniences and learning. When these facilities are not in place, it threatens the existence of the school. The collapse of infrastructures will lead to disruption of learning and increases the rate of school dropouts and crime waves such as anti-social behaviours like armed robbery, money rituals, act of hooliganism, yahoo activities, stealing, increased act of

cultism, prostitution and other such tendencies in our environments. According to Nwogu (2012), in the same direction believes that an enduring consistent flooding can permit qualified teachers to take up teaching jobs in flood secured areas thereby denying other areas qualified man-power of teachers (Onyije, Onyije & Onyije, 2021). Schools in upland area are used as IDP camps and may not be vacant for a long time. Bridges and dams leading to some of the schools especially in rural areas were destroyed or submerged for several weeks, electric poles get destroyed thereby cutting power supply to the schools keeping the students and teachers in perpetual darkness. Observing that enrolment of the school children may be hampered, Nwogu (2012) further opines that parents may decide to re-register their children to less flood dangerous areas where the children will be secured. The low enrolment prone schools due to flooding have a higher chance of being closed down. Another arching problem is that the school compound/campus left unused for a long duration can grow weeds and entertain reptiles such as snakes and other dangerous rodents. These disgusting situations will ultimately jettison the education system and deny the learners opportunity of putting in their best in the school. By these challenges the society will lose vibrant educated members but will produce half-baked individuals. Other times, it leads to additional year on the programme duration of the learners.

Impact of Flooding on Health

The immediate health impacts of flooding include drowning, injuries, hypothermia and animal bites risks, which are associated with the evacuation of patients to safe environment, loss of health workers and health infrastructures like essential drugs and supplies. In the medium-term, infected wounds, complications of injury, poisoning, poor mental health, communicable diseases and starvations are some of the negative effects of flooding on health of the people. In the long term, chronic diseases, disabilities, poor mental health and poverty-related diseases including mal-nutrition are the potential deposits of flooding among the people. Flooding causes damage to sanitation facilities, thereby increasing the risk of contamination of sources of water. This is capable of facilitating the spread of diarrhea and other diseases like cholera, mosquito breeding and increased vector-borne diseases such as malaria and typhoid. The loss of shelter and additional exposure to cold will also increase the risk of pneumonia and deaths of under age children (Hilmert, Kwasnicka-Gates, Teoh, Bresin & Fiebiger, 2016). Flooding also has the potential of depositing and spreading measles for the greatest disaster-related morbidity rates. National Emergency Management Agency (2013) recounted and ascertained that the 2012 flood crisis pushed communicable diseases, whose associated risk factor include; interruption of safe water, water-borne out break diseases, food-borne diseases and yellow fever, poor access to health services, malnutrition which World Health Organisation (2017) says comprises of natural

immunity leading to more frequent, severe and prolonged episode of infections. Flooding makes prompt clinical diagnosis and early treatment more difficult (FitzGerald, Clark & Hou, 2015).

Impact of Flooding on Social Life

Much damage has been carried out by flooding on the social life of the people. As though communication links and infrastructure such as power plants, roads and bridge damages are not enough economic activities have been fought by flooding to a standstill resulting in dislocation and dysfunctional of normal life for a long period of time. Similarly, general observation explains that the indirect effect on production assets in agriculture or industry inhibit regular activities lead to loss of livelihood. The spillover effect of the loss of livelihood can be felt in businesses and commercial activities. The high cost of relief and recovery may adversely impact negatively on infrastructure and other developmental activities in the environment and in certain cases may cripple the fragile economy of a nation like Nigeria. Consistent flooding has the potentials to discourage long-term investments by the government and private sector alike. Lack of livelihoods combined with migration of skilled labour and inflation may hamper the nation's economic growth. Transportation, education and loss of land values in the flood plains could lead to increased vulnerabilities of communities at the flood areas. The additional cost of rehabilitation, relocation of people and removal of property from flood affected areas can make government to divert the capital required for production and development into unexpected expenses (Ocher & Okoke, 2019).

Yet, another annoying social indices known as mass migration caused by frequent flooding enables loss of livelihoods, production and other prolonged economic saga, mass movement and population displacements. Migration to developed urban areas contributes to the overcrowding in the cities resulting to scarcity of food items, poor nutrition, amenities, transportation squabbles and unnecessary competitions for few available goods and services. Identifying loss of lives and property, Opiyo, Okayo and Ombiu, (2019) note that human lives as well as property were massively damaged and worsening health conditions as a result of water-borne diseases were the aftermath of flooding.

Politically, ineffective response and supply of relief materials during major floods may lead to public discomfort, discontent and lose of trust on the authorities and government of the day. Lack of developments in the flood-prone areas may cause social inequality and equity and gear up social unrest posing threat to peace and stability in the country (Dida, Gichere, Olado, Anyona, Matano, Abuom, Amany & Offulla, 2013).

Positive Impact of Flooding

It has been observed that while flooding has been characterised with damages and colossal losts, positive influences of flooding exist implying that all is not lost to perennial flooding. The positive effects of the wickedness of flooding involves; renewal of wetlands. Wetlands include swamps, bogs and marshes along a coastline. Wetlands filter out excess nutrients and pollutants and provide habitats for a wide variety of wildlife. Healthy wetlands promote healthy water supplies and even affect air quality. Wetlands also carry and deposit nutrients rich in sediments that support both plants and animal life. Flooding also adds nutrients to lakes and streams that give support to healthy fisheries.

Similarly, floods distribute and deposit river sediments over large areas of land. The sediments replenish nutrients in topsoil and make agricultural lands more fertile. Most of the communities along the flood plains of the rivers experience good bountiful harvest because of the periodic flooding enabling fertile and productive farmlands. Apart from renewal of wetlands and returning nutrients to the soil, flooding also assists in preventing erosion and maintaining land mass elevation. Soil deposited by flood waters disallow erosion and helps to maintain the elevation of land masses above sea level. The rapidly receding land of the river can assist communities along delta areas to prevent topsoil-replenishing sediments from being deposited in the delta. Besides, flooding recharges and replenishes ground water. Many populated centres depend upon ground water for fresh water supply. Flood water absorbs into the ground and percolates down through the rock to discharge the underground water will supply natural springs, wells, rivers and lakes with fresh water.

Concept and definition of counselling

There are certain problems an individual would encounter sometimes in life but would find it difficult to reach the answer alone hence; he requires a clue to help him solve such problem. The clue becomes the assistance rendered to the individual in need which can be referred to as guidance and counselling. Counselling is a process in which an individual who is helpless referred to as the counsellee or client is assisted by an individual referred to as the counsellor who is professionally trained to overcome the helplessness of the client as he/she supplies information, interacts and take up decision-making in a conducive environment. In counselling, the client is provided with friendly atmosphere which helps him/her to be less stressed up and be able to speak about his/her problems without molestation. The professional uses his expertise to help the counsellee overcome his problems through dialogue in order to function effectively in the society. Counselling is therefore a helping process which involves

mutual trust, understanding, confidentiality, empathy and rapport with the exhibition of the counsellor's professional qualities of friendliness, warm-positive regard, unassuming characteristics and assurance of secrecy of information exposed during counselling. The counsellor uses techniques such as discussion method, exchange of ideas, consultation, decision-making, dialogue and assignments to achieve his/her objectives. The counsellor uses therapies such as behaviour modification, networking therapy and others to achieve his purposes during counselling relationship.

The theory/model of flood was propounded by Gupta (2009) which links spatial-temporal statistics of rainfall, stream flow and flooding with physical watershed and channel network with characteristic spatial scales ranging from small tributary watersheds to large basins. The theory seeks to resolve questions such as relationships between a watershed's topography, the geometry of its river network and spatial statistical streams flow variations.

In his study about impact of flooding in Bayelsa state, Ibinaiye (2016) used a population of 300 families and a sample of 100 drawn from simple random sampling technique to investigate the effect of flooding in the State. The study adopted a descriptive survey research design. Two research questions guided the study and two hypotheses were formulated and tested at 0.05, alpha level of significance. The instrument for data collection was questionnaire titled-Impact of Flooding on Families was validated by two specialists in Guidance and counselling and Educational Measurement. A test-re-test reliability was conducted and 0.61coefficient was obtained. The result showed that there was no significant difference between flooding event and family health.

Statement of the Problem

Over the years, especially from 2012 – 2022 flooding has been a source of natural disaster occurrences that has caused damages of property, loss of human lives, displacement of families and homes, introduction of dangerous health and general lockdown of social lives of victims. There are also evidences of destruction of farms and livestock by flood. These arching problems have resulted into psychological poor mental health, anxiety, stress, somatic complaints and nightmares, loss of health infrastructures, malnutrition, contamination of water sources which facilitates the spread of diarrhea, cholera, malaria were some of the experiences from the flood victims.

Scope of the Study

The study aimed at investigating the impact of flooding on families in Ogba/Egbema/Ndoni Local Government Area in Rivers State. The study specifically covered the impact of flooding on health, psychological/emotional feelings of victims and impact of flooding on pupil/students' learning activities who are victims in the said local government council.

Research Questions

To facilitate this study, the following research questions were structured:

1. To what extent does flooding impact on the health of the victims?
2. To what extent does flooding impact on the psychological/emotional feelings of the family?
3. Do flooding impact on children/students' learning activities in Ogba/Egbema/Ndoni Local Government Area in Rivers State?

Hypotheses

The following hypotheses were formulated and tested at 0.05 alpha level of significance to guide the study thus:

1. There is no significant difference in impact between flooding and the health of family.

2. There is no significant difference in impact between flooding and psychological/emotional feelings of families.

3. There is no significant difference in impact between flooding and the Children/students' learning.

Methodology

The study adopted a descriptive survey design which aimed at investigating the impact of flooding on families in Ogba/Egbema/Ndoni local Government Area in Rivers State. Seven hundred parents/families in selected communities in the Local Government Council comprised the population of the study, while only one hundred and fifty (150) respondents constituted the sample for the study which was selected through purposive sampling technique. Each of the ethnic groups that constituted the sample were as follows: Omoku town 40, Egbema 20, Ndoni 25, Egi 25, Usomini 20 and Igburu, 20.The instrument used for data collection was a structured questionnaire which the researchers titled; ''Impact of Flooding on Families' Questionnaire''

(IFFQ). The instrument was prepared in a self-explanatory manner bearing in mind that some family members may not adequately read and write. The instrument had four sections. Section A was for demographic data of the parents, section B, elicited information on health, C elicited information on psychological emotional feelings and D elicited information on learning activities of the flood victims in the local government area. The instrument was validated by experts in Measurement and Evaluation and in Guidance and Counselling. Pearson Product Moment Correlation was used to test the reliability coefficient of the instrument and coefficient value of 0.75 was obtained. The administration of the instrument was carried out by the researchers and some trained youths on how to administer questionnaire especially to individuals who are not literate. 300 copies of the questionnaire were distributed to the respondents who were victims of flood while in PTA meeting in some of the schools in the local Government area by the researchers. This precipitated complete retrieval of the copies of the questionnaire. Mean and standard deviation statistics were used to answer the research questions, while t-test statistics was used to test the hypotheses at 0.05 alpha level of significance.

Results

Table 1: mean analysis impact of flooding on health of parents/victims.

Variables	N	mean	std	df	t-cal	t-crit	decision
Flood disaster	75	54.55	22.70	148	1.96	3.16	Sig
Health of victims	75	68.77	25.62				

Results in table 1 indicates that t-cal of 1.96 is greater than the t-critical of -3.16 at 0.05 alpha level of significance. It can be concluded that there is significance difference in impact between flooding and the health of the flood victims hence the hypotheses is rejected.

Table 2: mean analysis impact of flooding on psychological behaviours of parents/victims.

Variables	N	mean	std	df	t-cal	t-crit	decision
Flood disaster	75	52.4	21.71	148	2.17	1.96	
Psychosocial behaviours	75	59.6	24.61				

Results in table 2 show that t-cal of 2.17 is greater than the t-critical of 1.96 at 0.05 alpha level of significance. Therefore the null hypothesis is rejected. This indicates that flooding has impact on the psychological feelings of the people.

Table 3: parents'mean analysis impact of flooding on students' learning activities.

Variables	N	mean	std	df	t-cal	t-crit
Flood disaster	75	48.96	22.70	148	2.89	1.86
Learning Activities	75	53.96	25.71			

Table 3 shows that t-calculated is 2.89 and t-critical has1.86 is less than the t-calculated at 0.05 alpha level of significance. Therefore the null hypotheses of no significance difference is rejected It shows that flooding has negative impact on the learning behaviours of pupils/students in families that were affected by flood.

Discussion of Findings

The study found that flooding creates negative impact on families, r (298=54.55, p<05). This implies that families suffer difficulties in health arising from contaminated drinking water leading to the spread of diarrhea, malaria enabled by increase number of mosquito bites, exposure to cold risking pneumonia, cholera and poor mental health and damage of health facilities were the abysmal dangers created by flood disaster against the family members. National Emergency Management Agency, NEMA (2018) gives credence to the harms and damages of flooding to families in the community in Ogba/Egbema/Ndoni local government area. Malnutrition and prolonged cases of infections were also observed by Alberta (2018) as some of the impediments of flooding in the local government.

Apart from damages to health care, the study revealed that the psychological well-being of the people were also endangered. The loss of loved ones, displacement of homes, properties and businesses were capable of imposing anxiety, fear, frustration and long lasting traumatic effects on the people. Depression, difficulty in sleeping, trauma and other psychological negative behaviours may generate a long lasting poor psychological mental health as noted by (American Red Cross, 2018).

Counselling Responsibilities on Parents/Victims

The flood victims are full of feelings of anxiety occurring from losses and damages occasioned by the flood disaster and required to cope to their ugly situations. The counsellor is expected to manipulate these feelings in such a way to help them effect satisfactory solutions to their problems of multiple losses. These feelings which leads to irrational thinking; sometimes to commit suicide can be modified by restructuring the victim's perceptual and cognitive processes

so that situations are better perceived to reframe actions. The counsellor is obliged to manipulate and control the victim's feelings in a way to facilitate rational rather than irrational behaviours and also facilitate self-solve problems and to adjustment. The counsellor can use his expertise in counselling process to help the victims to modify their actions to fall within the societal norms and expectations through the application of acknowledgement, encouragement, and sharing of experiences to forestall undesirable behaviours of the unfortunate flood victims. Such methods include elimination by substitution, shaping, fading and conversational training skills are also important in creating understanding to the negative feelings of the family members.

The counsellor is expected to apply certain interventional strategies such as emotional coping skills, conversational training skills, thought-stopping therapy, cognitive restructuring, self-management technique, desensitisation training and behaviour rehearsal to ensure flood victims adjustment to their situations and change feelings of frustration, rejection and dejection noticed in them as a result of the losses incurred (Onyije & Onyije, 2020). Role-play through film-clips are effective measures the counsellor can manipulate together to create comfort in the unfortunate victims.

To further relax feelings of dejection and rejection in the victims (who are invariably parents), the counsellor can also organise group counselling which is a dynamic interpersonal process focusing on thought, behaviour and orientation to reality, catharsis and mutual trust, caring, understanding and support to those who have problems of inward traumatic feelings to cope (Onyije, Onyije & Onyije, 2021). Group counselling will undoubtedly provide opportunity for personal growth, self-understanding and self-actualisation of the flood victims. The counsellor can structure his treatment to help the victims to express these painful areas of them selves which their conscience and ideal self have rejected. Another purpose of the group counselling treatment is to allow the victims free expressions of their feelings, help to correct their misconceptions of the environment and to provide insight to help them to understand why they feel the way they do in order to increase their mastery over their emotions and modulled thoughts.

Conclusion

Impact of flooding on parents/families has been found to be all along dangerous to different segments of life situations. Flood disaster ushers in sudden diseases such as measles, malaria, diarrhea, obstruction of good portable drinking water and prolonged frequent severe infections. Family members are living in fear, depression and anxiety as a result of their damaged valuable important property such as buildings, hectares of farms, crops and businesses.

Some schools were closed as long as the flood lasted thereby denying the learners opportunity to assess learning.

Recommendations

The following recommendations were drawn based on the findings of the study thus:

1. Government agencies like National Emergency Management Agencies (NEMA) should be on stand-by attention to attend to flood victims on emergency reactions such as health of the people, psychological well-being and stress reduction purposes.

2. Counselling should be used to assist the helpless victims to face reality of life and to cope in their moduled disastrous negative psychological feelings bartered by anxiety, depression, bad health among other already jettisoned situations.

3 e-learning system of education should be encouraged by the country's education system to endear students into unabated and disrupted learning which is likely to increase duration of programme of students because of the incessant flood saga.

Reference

Adeloye, A. & Rustum, R. (2016). *Flooding and influence of urban planning. Ibadan:* Okpozogi Press.

American Red Cross Society (2018). Emergency appeal philippines floods. Retrieved from http://www.ifrc.org.accessed: November 12, 2008.

Dida, G., Gichere, S., Olado, G., Anyona, D., Matano, A., Abuom, P., Amany, J. & Offulla, A. (2013). Effects of drought and floods on crop and animal and socio-economic status of household in the lake Victoria basin of Kenya. *Journal of Emerging Trends in Economics and Management Science*, *4*(1), 31-41.

Federal Government of Nigeria (2018). National Emergency Management Agency, Abuja: Retrieved from http://www.acaos.org/img/disasters/dss.floods.pdf.Accessed December 10, 2021.

Gupta, P. (2009). The new scientific discoveries about the events that change history.

Assessment capacity project, (ACAPS) disaster summary sheet-floods. Retrieved from http://www.acaos.org/img/disasters/dss.floods.pdf.Accessed December 10, 2021.

Hilmert, C. J. Kwasnicka-Gates, Teoh, A.N., Bresin, K. & Fiebiger, S. (2016). Major flood related strains and pregnancy outcomes. *Journalof health psychology vol, 5 (2), 35-96.*

Isidore, K. K. Aljundi, S. Kamigaki, T. Hammad, K. & Oshirani, H. (2018). *Preventing and controlling infectious diseases after natural disaster*. Enugu: Lancaster press.

Jonkman, S. & Kelman, I. (2019). An analysis of causes and circumstances of flood disaster. *Journal of Death Disaster, Vol,* 29 (1), 75-79.

Nwogu, S. (2012, October 5). Teachers and pupils groan as Kogi flood affects 54,000 school children. *Punch, p.8*

Opiyo, R. Okayo, J. & Ombui (2019). Impact of flooding on attainment of education for all (EFA) and vision 2030 in Nyando Basin, Kisumu country. *International Journal of disaster management and risk reduction,Vol,* 4 (2), 19-31.

Ocher, M. & Okoke, E. (2019). *Social impact and people's perception of flooding in Makurdi town.* Makurdi: Magudu Press.

Onyije, A. C. Onyije, D.H. & Onyije, S. (2021). Impact of coronavirus (COVID-19) pandemic lockdown on student's academic activities in Federal College of Education (Technical): Implication for counselling. *Journal of Guidance and Counselling studies,* 5 (issue 2), 385-397.

Onyije, A. C. & Onyije, D.H. (2020). Counselling implication for the second wave of coronavirus (COVID-19) pandemic on health care. *Nigeriajournal of issues in science education,* 5 (issue 2), 260-272.

World Health Organisation (2017). Flooding and communicable diseases, fact sheet available from: https://www.who.int/mews-room/fact-sheets/detail/mental-health-in-emergencies.

Department of Guidance and Counselling, Faculty of Education, Nnamdi Azikiwe University, Awka.