

## **Effects of Selected Diseases on Farmers in Agricultural Production in Ukum Local Government Area Of Benue State, Nigeria**

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**Abstract:** *One of the reasons for low productivity in Nigeria especially in rural the area is the intensity of diseases. Five diseases were selected: guinea worm, hepatitis B, HIV/AIDS, malaria and typhoid fever and their effects on farmers' productivity were examined. A total of 110 respondents were selected randomly from five council wards. Primary and secondary data were collected. Primary data were gathered using structured questionnaire through interview. Data collected were analyzed by descriptive statistics. Result of the findings revealed that malaria was the most prevalent disease in the area 46.4%. People spent less than ₦100,000.00 41.8% for treatment of diseases in a year, 38.2% quality of medical treatment obtained in the area was inadequate, 23.5% each from Kundav and Borikyo council wards were mostly affected by the incidence of diseases, 63% no money for treatment of various ailments. It is recommended that health centres should be established in the rural areas for treatment of rural farmers.*

**Keywords:** *Effects, selected, morbidity, agricultural production, farmers*

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### **I. Introduction**

In humans, disease is often used more broadly to refer to any condition that causes pain, dysfunction, distress, social problems and or death to the person afflicted or similar problems for those in contact with the person. In a broader sense, it sometimes include injuries, disabilities, disorders, deviant behaviour, syndromes, infections, isolated symptoms and a typical variations of structure and function, while in other contexts and for other purposes these may be considered distinguishable categories. Diseases usually affect people not only physically but also emotionally as contracting and living with any disease can alter one's perspectives on life, and their personality [1].

There are four main types of diseases: pathogenic, deficiency, hereditary and physiological. Disease can also be classified as communicable and non-communicable. The term disease broadly refers to any condition that impairs normal function of the system or body. This term is commonly used to refer specifically to infectious diseases, which are biochemically evident that result from the presence of pathogenic microbial agents, including viruses, bacteria, fungi, protozoa, multi-cellular organisms and aberrant proteins known as prion (Emson, 1987).

Diseases that are capable of transmission from one person to another by one or more variety of transmission mechanisms are categorized under the group of communicable diseases such as HIV/AIDS, hepatitis B, malaria, typhoid and guinea worm among others (WHO, 1999). The effect of diseases on agriculture is related to people's livelihood and varies according to different ecological zones, farming system and stage of the disease. It may result in a shift from cash to less varied food production or to a reduction of productivity and cash income with adverse effects on household food security (FAO, 1999). Research has shown that food insecurity and malnutrition, rather than medical treatment and drugs are the most immediate problems faced by female headed diseases affected households. These further aggregates the situation as good nutrition is of great importance to people suffering from disease including children and pregnant women (WHO, 1999).

About 70 percent of the working population is employed in the agricultural sector, which is very common in the developing countries where access to good health care facilities is non-existence especially in the rural areas. High losses are recorded in agricultural production due to infectious diseases. When farmers are sick, they cannot go to farm to work or abandon their farm activities. Also the money that would have help them in obtaining farm inputs, improved implements or hire tractors and labourers is used for treatment which lead to low productivity (Fanello and Baker, 2010). Again it retards educational development of children through poor attendance at school. It may be associated with increased causes of still birth and greatly contributes to high morbidity and mortality rate; mothers of large number of children suffering from diseases are less able to participate in farm work thereby reducing the household incomes and savings.

The effect of disease on agriculture is felt on two key farm production parameters: first, labour quality and quantity will be reduced, initially in terms of productivity when the disease infected person is ill and later the supply of household labour will fall with the illness/death of the person. Other household members will deviate production time to caring for the sick person (WHO, 2000). The second factor for household agricultural production that diseases will affect is the availability of disposable income. During episodes of illness, households financial resources could be diverted to pay for medical treatment and eventually to meet financial cost such resources could otherwise be used to purchase agricultural inputs (Gverny, 1999).

## **II. Methodology**

Ukum is one of the 23 Local Government Areas (LGA) in Benue State. It borders Wukari LGA of Taraba State to the north, Logo LGA to the west, Katsina-Ala, LGA to the South-east and it is located between longitude 9<sup>o</sup>37 and 9<sup>o</sup>45 East and latitude 7<sup>o</sup>33 and 7<sup>o</sup>41 North. It is located in the guinea savannah and experiences tropical climate with two distinct seasons. The wet and the dry seasons, the wet season starts early April – October and the dry season starts from (November – March). The area experiences a rainfall duration of seven months (April –October) and this favours the production of several crops such as yam, cassava, maize, groundnut, millet. The main occupation of the people is farming. Simple Random sampling was adopted. Five council wards; Borikyo, Kundav, Uyam, Mbatsun and Ugbaan were selected purposively based on intensity of diseases reported cases, five diseases including guinea worm, hepatitis B, HIV/AIDS, malaria and typhoid fever were also selected based on intensity of their reported cases from medical records. Twenty two (22) respondents (household heads) were randomly selected from each of the five council wards making a total of 110 respondents. Both primary and secondary data were collected; primary data were collected by administration of questionnaire through interview, secondary data were gathered from documents, journals, proceedings, periodicals among others. Data collected were analyzed using descriptive statistics.

## **III. Results And Discussion**

Results in Table 1 show that 46.4% of the respondents stated that malaria is the commonest disease experienced in the area. This is because many people in the rural area do not consider sanitary condition of their surroundings as a matter of importance. A lot of people in the rural area live in compounds surrounded by bush and in other places the surrounding is also water logged. The poor environmental sanitation in some rural areas exposes many people to many diseases causing agents. It provides a suitable environment for the breeding of mosquitoes which cause malaria among others. This is why malaria is one of the diseases with the highest number of reported cases in the rural health centres especially in Nigeria. This collaborates Nicky (2010) who reported that mosquitoes breed in water logged and bushy areas capable of bringing malaria.

Results in Table 2 reveal that 41.8% of respondents spent less than ₦100,000.00 on treatment of diseases in a year. This is because the annual income of people in the rural area is low so is the amount of money spent for treatment of diseases. Apart from that, it is when the health condition of a person is so critical that such a person is taken to health centre for treatment; the rural people do not take all illness cases for treatment to health centres except when such case is very critical.

Result in Table 3 reveal that 38.2% of the respondents were of the view that quality of medical treatment obtained in the rural area was inadequate. This is because there are no standard health facilities in the rural area, most people that operate health centres in the rural areas are not qualified doctors and regulatory authorities hardly visit such areas to check those illegal health facilities established by unqualified persons. This results to the practitioners offering sub-standard services and the use of unqualified/quack personnel at the rural health centres. Though they are unqualified medical personnel but are popularly known in the rural area as 'doctors' and are patronized by people in the villages who come from far and near. In the government hospitals, the number of medical personnel posted to such establishments in the rural areas is inadequate which has to copy with a large number of patients. Many people leave government health facilities dissatisfied with the quality of services offered to them due to large number of patients the facilities have to attend to.

Results in Table 4 indicate that 23.5% of the respondents stated that Kundav and Borikyo council wards each were mostly affected by the incidence of diseases. This could be attributed to the long distance between these two council wards (Kundav and Borikyo) from the local government headquarters which serve as a host to good health facility (general hospital) for treatment of patients. The money to pay for treatment of a sick person is another problem. Apart from sale of farm produce on market days which is after every 6 days, people from Kundav and Borikyo council wards have no other means of getting money. Therefore, when someone is sick they resort to taken the sick person either to local medicine vendors for treatment pending the market day when farm produce would be sold and the sick person taken to general hospital at the local government headquarters for better treatment or self medication and praying for God to heal the sick person.

Results in Table 5 depict that majority (63%) of the respondents stated that there was no money for treatment of various diseases. This is a clear indication that they are peasant farmers, they produce on small

scale with corresponding low income or the small farm is only used for household consumption with a little produce for sale which leads to the problem of no money. Furthermore, the cost of health care nowadays is very high that most peasant farmers when sick, the cost of treatment could be higher than their annual income. These often result to many people dying in the rural areas without any attempt to be treated or others die in the hands of local medicine vendors because they cannot afford the cost of good treatment in hospitals.

#### IV. Conclusion

The highest employer of labour in Nigeria is agriculture which is practice at peasant level however, diseases are threatening the farming occupation as malaria, typhoid fever among others have affected the farming occupation negatively as many weeks are spent in the health centres by farmers for either being sick or taking care of a sick person. This has reduced significantly the number of family labour and the minute income of the farmers that might have been invested in the farm business. As a result of low or single source of income farmers have resort to taking their sick ones to patent medicine shops, patronizing unqualified medical practitioners among others, this often result to death of many people prematurely. Both the private and public sectors should establish well equipped health centres in the rural areas to cater for the health needs of the rural farmers.

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**Table 1: Distribution of Respondents According to Prevalence of Diseases**

Disease	Frequency	Percentage
Malaria	51	46.4
HIV/AIDS	21	19.1
Hepatitis B	17	15.5
Typhoid fever	15	13.6
Guinea worm	6	5.4
<b>Total</b>	<b>110</b>	<b>100</b>

**Table 2: Distribution of Respondents Based no Amount of Money Spent on Treatment of Diseases in a Year**

Amount (₦)	Frequency	Percentage
Less than 100,000.00	40	41.8
10001.00 – 200,000.00	30	27.3
30001.00 & above	20	18.2
20001.00 – 30000.00	14	12.7
<b>Total</b>	<b>110</b>	<b>100</b>

**Table 3: Distribution of Respondents According to Quality of Treatment**

<b>Quality of treatment</b>	<b>Frequency</b>	<b>Percentage</b>
Inadequate	42	38.2
Very adequate	33	30.0
Adequate	23	20.8
Highly adequate	12	11.0
<b>Total</b>	<b>110</b>	<b>100</b>

**Table 4: Distribution of Respondents by Council Ward that is Most Affected by Diseases**

<b>Council ward</b>	<b>Frequency</b>	<b>Percentage</b>
Kundav	25	23.5
Borikyo	25	23.5
Ugbaam	21	20.1
Mbatsum	20	18.4
Uyam	19	14.5
<b>Total</b>	<b>110</b>	<b>100</b>

**Table 5: Distribution of Respondents Based on Constraints Faced by Farmers in Treatment of Diseases**

<b>Constraint</b>	<b>Frequency</b>	<b>Percentage</b>
No money	70	63.6
Long distance to		
Health facilities	14	12.7
Taking care of the sick person	14	12.7
Poor health facilities	10	9.2
Others	2	1.8
<b>Total</b>	<b>110</b>	<b>100</b>