

Correlates of Ill Health Conditions and Farmers' Productivity in Ilorin East Area of Kwara State, Nigeria

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Abstract

The study examines the ill health conditions experienced and farmers' productivity in Ilorin East Local Government Area of Kwara State, Nigeria. Primary data were duly obtained using well-structured questionnaire which was administered on eighty farmers. Descriptive statistics and Pearson Product Moment Correlation (PPMC) analyses were employed. Results however revealed that majority 100%, 85%, 77.5% and 56.25% of respondents have experienced malaria, typhoid fever, diarrhea and stomach ache respectively. Results further indicated that majority 97.5% and 67.5% of respondents who have experienced malaria and typhoid fever patronize modern medical services but 62.5% and 37.5% who have experienced diarrhea and stomach ache access traditional medicine for healing. PPMC analyses showed the ill health experienced by respondent were significant related to their farm size. Results also showed that health care services available for farmers were not significant related to their productivity. The study therefore concludes that malaria and many others diseases and illnesses are ill-health conditions facing farmers in the study area. The study suggests the need for quick health care delivery that will meet the health care need of farmers in the study area, most especially preventive measures to control mosquito.

Keywords: Ill-health: farmers: productivity: Ilorin East LGA: Kwara State.

INTRODUCTION

Despite high yielding vegetation and blessings of abundant agricultural resources in Nigeria, the country's effort to increase food production for its ever increasing population she still fall short of supply and a lot of people to hungry (8). To fight against poverty and hunger through increased agricultural productivity, good health of farmers is important. Good health status of farmers will enhances work effectiveness and productivity through increase in physical and mental capacities (15). Improvement of health status plays an importance role in promoting economic development by increase productivity of labour (20; 12).

In contrary, (9) reported that in agricultural communities poor health reduces income, productivity and could inhibit economic growth of the people. (22) Stated that health affect agricultural system by affecting the health of the farmers and that poor health results in loss of work days or decreases workers capacity, decrease innovation ability and ability to explore diverse farming practices. (6) Concluded that diseases makes farmers not to utilize fully all inputs at their disposal were; Malaria, Musculoskeletal disorder, farm injury, yellow fever, typhoid fever, schistosomiasis (disease caused by blood flakes), diarrhoea disease, respiratory diseases, and other disorder. Several studies have examined farmers' health conditions among the farm population. Some focused primarily on hearing loss (5), injury and musculoskeletal disorders (11), hypertension (10), guinea worm (2).

Therefore, it is important to examine the common diseases and illness and extent it has affected agricultural productivity. This study therefore, offer a switch in thinking by examining ill-health conditions in Kwara States, relying on primary data gathered from the study area. Specific objectives of the study are to: (i) investigate the socio-economic characteristics of farmers, (ii) determine ill-health conditions experienced by farmers, (iii) identify of health care services accessed for different ill-health/diseases experienced by farmers, and (iv) examine relationship of ill health of farmer and their productivity.

METHODOLOGY

The study was conducted in Ilorin East Local Government Area of Kwara State, Nigeria. The area of the study is one of the local governments carved out in Ilorin in 1991 by the federal military government. The local government has it land area to be 846sqkm and the annual temperature of the area is usually at 31.6°C. The administrative head quarter of the local government is located at Oke-oyi which is the oldest town in the area. The inhabitants of the study area are majority Yoruba speaking people; they are majorly small scale farmers, while the remaining majority especially those in the bigger villages are civil servants. Villages within the study area includes; Agbayangi, Apado, Iponrin, Ile-Apa, Elekoyangan, Oke-oyi and Sango. The total population of farmers in the study area is 3478 (three thousand four hundred and seventy eight) farmers (Ministry of Agric. And Natural Resources Kwara State 2010).

The population of study comprises all the farmers in Ilorin East Local Government Area of Kwara State. Multi – stage sampling techniques was used to select the respondents for this research. Four (4) farming communities (Elekoyangan, Oke-Oyi, Oke-Ose, and Ile-apa) were purposefully selected based on their agricultural activities regarding root crops production. Twenty (20) farmers were drawn from each of the four (4)

farming communities selected. A total of 80 farmers were selected as the sample size for the study.

The instrument used to collect primary data collection was structured interview schedule guide. The questionnaire solicited information from the respondents on issues that bother on the set objectives of the study. Twenty (20) copies of structured questionnaires were randomly administered in each of the four (4) villages selected. A total of 80 structured questionnaires were used. Secondary data source included related journal articles of agriculture, social sciences, and medicals online.

Data collected were subjected to both descriptive and inferential statistics. The descriptive statistics used were frequency count and percentages while inferential statistics of Pearson's Product Moment Correlation (PPMC) analysis was used to assess for hypotheses stated below:

Hypotheses of the study were stated in null form as below;

HO₁: There is no significant relationship between selected personal characteristics of the farmers and some selected ill-health conditions experienced by farmers,

HO₂: There is no significant relationship between health care services received by respondents and their productivity

Gross Margin Analysis

Gross margin analytical tool is the estimate of the difference between the Gross Revenue and the Total Variable Cost of farmers under the study. It was required to estimate the productivity of ill health farmers in the study area.

$$\text{Gross Margin/hectares} = \frac{\text{Total Revenue} - \text{Total Variable Cost}}{\text{Total hectares}}$$

Where:

Total Revenue (Naira) = Total sales made by farmers

Total variable cost = Total capital + Total Labour

Farm size (hectares)

RESULTS

Eighty farmers interviewed (87.5% male and 12.5% female) with majority (36.5%) aged 60 and above. Most of the respondents were married (62.5%). Only 2.5% attained tertiary education, 50% had primary education. Majority (76.25%) had family size between 5 – 10 people, 21.25% had less than 5 people. About 47.5% of respondents had farm size of less than 2 hectares followed by 25.0% who had between 2-3 hectares. Most of the respondents do trading (58.75%), 15% were engaged in Okada riding and 17.5% were into hunting job. Higher percentage (63.75%) uses family labour for farming while about 36.25% uses both hired and family labour for farming (Table 1).

All respondents (100%) indicated that malaria as common illness they have experienced. (Table 2) out of which (97.5%) access modern health care services while only (2.5%) use traditional healing means to cure malaria. For antenatal care, all (14) access modern health care services. Most (13.3%) access modern health care services for cure of cough among respondents. Stomach ache (37.5% traditional healing and 18.3% modern health care). Also, results revealed that majority 67.5%, 17.5%, 30%, 6.3%, 40%, 12.5%, 10% and 13.8% of respondents who have experienced Typhoid fever, Snake bite, injury, Eye problem, child delivery, Hypertension and tooth ache respectively indicated that they access modern health care services for cure. Furthermore, majority 62.5%, 7.5%, 27.5%, 2.5%, and 42.5% of respondents who have experienced diarrhoea, dysentery, head ache, sexually transmitted diseases, and tiredness respectively patronized traditional healing services for cure (Table 3)

Frequency of patronage to modern medical health for treatment of illness/disease; 87.5% were frequent, 10.0% were occasional and 2.5% never. As regards vaccination and immunization; 48.0% were frequent, 33.5% were occasional and 18.5% never. (Table 4)

PPMC analysis indicated that farm size was significant ($r = 0.551$, $p \leq 0.000$) with ill-health conditions experienced by respondents at 0.05 level of significance.

Gross margin/hectares (Productivity)

Total Revenue (Naira) = Total sales made by farmers = ₦ 2,489,440

Total variable cost = Total capital (₦ 1,670,000) + Total Labour (N 208,800) = ₦1,878,800

Farm size (hectares) = 245.5 hectares

$$\text{Gross Margin/hectares} = \frac{2,489,440 - 1,878,800}{245.5}$$

$$\text{Gross Margin/hectares} = \text{₦}2487.3/\text{hectares}$$

DISCUSSION

Common illness experienced by farmers in the study is malaria. This finding is similar to (18) in Yewa North

Area of Ogun State, (19) in Kogi State, Nigeria and (17) conclusion that 72% of the farmers were susceptible to malaria in rural southwest of Nigeria. Malaria burden among farmers in the study area is enormous considering the frequency and prevalence of diseases. Effects of malaria to farmers can be disadvantageous. (22) Had reported multiple channels by which malaria impedes development, including effects on fertility, population growth, saving and investment, worker productivity, absenteeism, premature mortality and medical costs. (3) had stated that Nigerian subsistence farmers spend as much as 13% of total household expenditure on treatment of malaria alone.

Most of the farmers were aged above 60 years. This implies that farmers will need more medical services delivery for effective performance on farm. This is in line with (4) who reported that adults aged farmers 60+ years have an average of 2.2 chronic conditions each. With this, most respondent in the study area frequently visit modern health care centres to treat malaria and other diseases. This is an indication for positive behaviour to seek health care facilities despite their low level of education. Similar higher percentage response of farmers' access to modern healthcare facilities in Ikwuano Area of Abia State, Nigeria was reported by (7). Also, (16) had reported similar positive attitude of farmers to eradication of guinea worm in Orire Area of Oyo state Nigeria. Education of respondent was found inversely related to ill health experienced. This is as contrary to (14) that education was found to influence health-seeking behaviours of farmers. Although, (14) have reported education is a key element of sustainable development and is perhaps one of the most important underlying determinants of health at both individual and community levels. On the contrary, most respondents that patronized traditional healing for treatment of diarrhoea may be influenced by factors such as its effectiveness as indicated by (1) on the use of traditional healing in Kwara state to include its effectiveness.

The gross margin per hectare reveals that farmers in the study area were producing at a very low scale of ₦2487.3/hectare. Although health care services received by respondents and their gross margin/hectare productivity show no significant relationship, this implies that with provision of stable health care services for respondents, productivity will still remain low pointing that other factor (intermediate factors) of production must have affect their productivity. Relationship found between farm size and ill health experienced by farmers implies that increase in farm size of farmers, the more ill health condition farmers experienced. This may be due some farming hazards such as more exposure to chemicals and longer day work to cater for the larger plot of land cultivated. (18) had stated that poor safety precautions and information among small scale farmers were the main cause of ill health.

CONCLUSION AND RECOMMENDATIONS

Malaria and many others have been discovered to be ill-health conditions experienced by farmers in the study area. The findings of this study, therefore, draw attention to the relatively high rates of ill-health among farmers which can have negative effect on farmers' effectiveness in the study area and suggest the need for quick health care delivery that will meet the health care need of farmers in the study area. Farmers should also be taught about preventive measures to control mosquito. Agricultural extension workers should increase their services to the rural farmers and make them understand the negative impact of farm related health problems and encourage them to patronized modern health care available.

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Table 1: Socioeconomic Characteristics of Respondents

<i>Personal Characteristics</i>	<i>Frequency (N= 80)</i>	<i>Percentage (100%)</i>
Age range (Years):		
More than 31- 40	11	13.8
40– 50	22	27.5
51 - 60	18	22.5
greater than 60	29	36.5
Gender:		
Male	70	87.5
Female	10	12.5
Marital Status:		
Married	50	62.50
Widowed	21	26.25
Single	9	11.25
Educational level:		
No formal education	22	27.5
Primary education	40	50
Secondary education	16	20
Tertiary education	2	2.5
Farming Size (Hectare):		
< 2	38	47.5
2 – 3	20	25.0
4 – 5	15	18.7
Above 5	7	8.8
Family size (people):		
Less than 5	17	21.25
5 – 10	61	76.25
10 – 15 and above	2	2.50
Secondary Occupation:		
Security Job	4	5
Hunting job	12	15
Okada riding	14	17.5
Trading	47	58.75
Others	3	3.75
Labour type:		
Family labour	51	63.75
Both hired and family labour	29	36.25

Table 2: Ill- health Conditions Experienced by Respondents*

<i>Ill- health Conditions Experienced</i>	<i>Frequency (n=80)</i>	<i>Percentage</i>
Malaria	80	100
Antenatal	12	15
Stomach ache	45	56.25
Cough	11	13.75
Diarrhoea	62	77.5
Typhoid fever	68	85
Snake bite	16	20
Dysentery	9	9
Head ache	37	46.25
Injury	28	3.5
Eye problem	6	7.5
Pain/rheumatism	39	48.75
Sexually transmitted disease	2	2.5
Tiredness	59	13.75
Child delivery	10	12.5
Hypertension	9	11.25
Tooth ache	12	15

Note: * means Multiple responses

Table 3: Health care Patronized based on Ill- health Conditions Experienced by Respondents*

Ill- health Conditions Experienced	Patronized Modern Health care Service		Patronized Traditional Healers/practices	
	Frequency	Percentage	Frequency	Percentage
Malaria	78	97.5	1	2.5
Antenatal	13	16.3		
Stomach ache	15	18.75	30	37.5
Cough	11	13.3	1	1.3
Diarrhoea	12	15.0	50	62.5
Typhoid fever	54	67.5	14	17.5
Snake bite	14	17.5	2	2.5
Dysentery	3	3.8	6	7.5
Head ache	15	18	22	27.5
Injury	24	30	4	5
Eye problem	5	6.3	1	1.3
Pain/rheumatism	32	40	7	8.8
Sexually transmitted disease			2	2.5
Tiredness	25	31.3	34	42.5
Child delivery	10	12.5	-	-
Hypertension	8	10	-	-
Tooth ache	11	13.8	-	-

Note: * means Multiple responses

Table 4: Health care services received from modern medical services provider by Respondents

Health services received from modern health care service provider by farmers	Frequently (Percentage)	Occasionally (Percentage)	not at all (Percentage)
Treatment from ill-health	87.5	10.0	2.5
Vaccination and immunization	48.0	33.5	18.5
Maternal health and child delivery	3.5	2.0	5.0

Table 5: PPMC analysis between personal characteristics and health care patronized based on Ill- health Conditions Experienced by farmers.

Selected Personal Characteristics	r - value	p - value	Decision
Age	0.104	0.361	Not significant
Gender	0.041	0.121	Not significant
Farm size	0.551	0.000*	Significant
Marital status	0.049	0.684	Not significant
Educational status	-0.516	0.000**	Significant

Note: *significant at $p < 0.05$, ** significant at $p \leq 0.01$ (2-tailed)

Table 6: Summary of PPMC analysis between health care services received by respondents and their productivity

Productivity	Gross margin/hectare
Health services: correlative	- 0.045
:Probability	0.695