

ANALYSIS OF HEALTH EXTENSION PACKAGES FOR COMMUNITY DEVELOPMENT AMONGST FISHERMEN IN BONNY LOCAL GOVERNMENT AREA OF RIVERS STATE, NIGERIA

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ABSTRACT

This study analyzed health extension packages for community development amongst fishermen in Bonny Local Government Area of River State, Nigeria. Multi-stage sampling procedure was used to select 120 fishermen who have utilized extension health packages from 6 communities of Main island clan and the Hinterland clan in the local government area. Interview schedule was used to elicit information from the respondents. Frequency counts, percentage, mean and linear regression was used to present and analyse data collected. Findings from the study showed that 83.30% were male, with a mean age of 43 years, married (65.80%) and had a household size of 2-3 person (44.2%). The health packages available in the study area are: maternal and child health (95.00%), sensitization on health matters (personal/fishing hygiene) (93.30%), treatment of infectious diseases (93.30%), family planning guidance (90.00%), malaria treatment and prevention (89.20%), heart attack prevention (88.30%), BP checkup (85.80%), dissemination of HIV/AIDS health campaign (83.30%), immunization against major infectious diseases (83.30%), management of sexually transmitted diseases (80.80%), prostate cancer diagnosis (80.00%) and diagnosis of ailment (79.20%) while COVID 19 vaccination (7.50%) and COVID 19 awareness campaign (25.50%) were not available. The grand mean of 2.85 indicated that the fishermen utilized the extension health packages available except for COVID 19 vaccination (1.98) and COVID 19 awareness campaign (2.07). Also, the grand mean of 3.04 indicated a positive perceived effect of fishermen utilizing extension health packages on community development such as maintaining a good health hygiene thereby preventing the spread of diseases in the community (3.00), helping fishermen in participating in social activities in the communities (2.98) among others. The study concludes that there were extension health packages available and utilized by fishermen for community development. Based on the findings, it was recommended health extension workers should make COVID 19 vaccination available for fishermen to utilize and also intensify the awareness campaign on COVID 19 in the study area.

Keywords: Health Extension, Packages, Community Development, fishermen

INTRODUCTION

Health Extension Programme is one of the most innovative community-based health Programme in Nigeria. It is based on the assumption that access to quality primary health care in rural communities can be improved through transfer of health knowledge and skills to households (Federal Ministry of Health, 2007). Health Extension packages are those health care services designed with a defined package of essentially promotive, preventive and basic curative services targeting households in a community. Improving utilization of health care services was among the major objectives of the Health Extension Programme. Federal Ministry of Health (2013) generally pointed out that health extension workers hold the following roles: Creating connections between vulnerable populations and healthcare systems; facilitating healthcare and social service system navigation; managing care and care transitions for vulnerable populations; reducing social isolation among patient populations; determining eligibility and

enrolling individuals into health insurance plans; collecting data and relaying information to policymakers to inform policy change and development; providing informal counseling, health screenings, and referrals and building capacity to address health issues.

Consequently, roles and activities of health extension workers are tailored to meet the unique needs of the communities they serve. A health extension worker's role also depends on factors such as whether they work in the healthcare or social services sectors. They go house to house to train, demonstrate, and educate families to create role models in line with health extension programme and to disseminate it for the community. The health extension workers provide services in the health posts and at the community. The utilization of maternal health services is largely influenced by the available services. Availability of the services will make fishermen to utilize them properly and effectively. Though distance and physical accessibility are critical to utilization of

services, other barriers such as infrastructure and proper staffing are critical to encourage utilization (Nteta *et al.*, 2010).

Matheson (2001), fishermen were reported to seek health services only for very serious health problems such as accidents or major health emergencies like cardiovascular events. Consequently, fishermen in Bonny are largely involved in small-scale fishing and are exposed to a lot of physical and mental stress. These include long-distance journeys into the ocean with small wooden fishing boats. These boats are either propelled manually by paddling or motorized with outboard engines. They also involve themselves in carrying heavy loads, handling fishing gears, and are exposed to the elements (wind, cold, rain, etc.), and vibrations, which may adversely affect their health. The focus of the Programme is on improving household behaviors and providing basic health services that have high impact and are cost-effective, such as improving sanitation and personal hygiene, childhood vaccinations, family planning, prevention and treatment of malaria, and treatment of diarrhea and pneumonia (introduced recently) in under-five children, women and men fishermen inclusive. The health of fishermen is very important to their family wellbeing; the provision of fish for the consumption of the people in the country and the state itself, then, health extension workers should prioritize prevention and curative efforts appropriately to fishermen in Bonny Local Government Area of Rivers State.

For Community development to occur people in a community must believe working together can make a difference and organize to address their shared needs collectively (Emeh 2012; Albert and Igbolwe, 2014). Community development is a group of people in a community reaching a decision to initiate a social action process to change their economic, social, cultural and environmental situation. It creates an environment where people can exercise their full potential to lead productive, creative lives and it can only occur when the members are healthy. Fishermen are members of a community; they have to stay healthy to participate in community development activities and they also access and utilize extension health packages available in their community and that was why the study assessed how utilizing extension health packages by fishermen have helped them in carrying out community development activities in the study area. Based on the foregoing background, this study analyzed health extension packages for community development amongst fishermen in Bonny Local Government Area of Rivers State.

OBJECTIVES OF THE STUDY

The Specific objectives of the study were to:

1. describe the socioeconomic characteristics of the fishermen who accessed extension health packages in the study area,
2. identify the types of health extension packages available to fishermen,

3. determine the health extension packages utilized by fishermen,
4. ascertain perceived effect of health extension packages on community development in the study area.

STATEMENT OF HYPOTHESIS

Ho: personal characteristics of the beneficiary fishermen do not significantly influence the utilization of health extension packages in the study area.

METHODOLOGY

The study was carried out in Bonny Local Government Area situated at the southern edge of Rivers State in the Niger Delta region of Nigeria. It covers the whole of Bonny Island and mainland area and is located about 40 kilometers to the south-eastern part of Port Harcourt, which is the state capital. Bonny is a trapezoid-shaped landmass with the following co-ordinates: North-Westward Latitude 4°33'N and Longitude 7°08'E: North-Eastward Latitude 4°30'N and Longitude 7°20'E: South-Westward Latitude 4°22'N and Longitude 7°20'E, and South-Westward; Latitude 4°22'N and Longitude 7°08'E It is located at the edge of the Atlantic Ocean on the Bight of Bonny. The island of Bonny serves as the seat of a traditional state known as the Kingdom of Bonny and has a population of about 170,000 people (National population commission (NPC) 2006). Bonny community is subdivided into two main segments – the mainland and the hinterland. The mainland comprises Bonny Island and its segments, namely the Main Island (Township), Sandfield, Iwoama, Orosikiri, Aganya, Ayambo, Akiama, Workers Camp, and some outlying fishing settlements lying along the Bonny River coastline, while the hinterland includes the village communities such as Kuruma, Ayama, Kalaibiama and Oloma.

Multi-stage sampling procedure was used. First, was to cluster the study area into two clans- Main island clan and the Hinterland clan. The Main island clan has 8 communities, while the Hinterland clan consists of 4 communities. Secondly, purposive sampling procedure was adopted to select communities where fishermen who have accessed extension health packages were predominant - four (4) and two (2) communities from the main island and hinterland respectively. Finally, the study adopted the proportionate simple random sampling procedure in selecting 120 respondents from the 691 fishermen from 12 communities in the study area The collected data were presented and analyzed using percentages, frequency, mean and linear regression.

RESULTS AND DISCUSSION

The result in table 1 showed the personal characteristics of the fishermen in the study area. However, the gender distribution of the fishermen indicated that male represented 83.30% while female represented 16.70% of the study sample. The

implication of the result is that male fishermen represented majority of the respondents which agrees with Albert and Isife (2014) that male dominant in fish catch livelihood. The age distribution of the fishermen indicated that majority (31.70%) were aged 38-47 years, with a mean of 43 years. This result could be due to the fact that people of the age bracket engage in fishing because, it is the only economic activity they could lay their hands on, for lack of quality job. The finding is consistent with the findings of Jaji (2013) whose study revealed that majority of the respondents in fish processing (76.1%) were between the age range 21 – 50 years. In terms of the highest level of formal education of fishermen; 15.80% of the fishermen do not have formal education, 27.50% had First School Leaving Certificate (FSLC), 44.20% had West African Examination Certificate (WAEC), and 12.50% had Tertiary Education. The implication of the result is that majority of the fishermen had WAEC.

The result could be due to the fact that participants in the fishing profession do not necessarily need to acquire higher education, since it is a semi-skilled vocation (Albert et al 2015). The marital status distribution of the fishermen indicated that majority (65.80%) were married implying that the fishermen have responsibility to carter for their family as marriage comes with responsibility according to Albert (2017) and Nnodim et al (2012). The finding is in line with the findings of Jaji (2013), whose study revealed that most of the men (90.4%) were married. More (44.2%) of the fishermen had household size of 2-3 persons, with a mean of 3 persons. The result could be adduced to the fact that many of the fishermen are married and are expected to have children and a higher number (34.20%) of the fishermen earn between 51,000-70,000 indicating they earn more than the approved minimum wage in the country.

Table 1: Percentages Distribution of the socioeconomic characteristics of the fishermen who utilized extension health packages in the study area

S/N	Variables	Frequency	Percentage (%)	Mean
Gender	Male	100	83.30	
	Female	20	16.70	
	Total	120	100	
Age (years)	18-27	12	10.00	43 Years
	28-37	29	24.20	
	38-47	38	31.70	
	48-57	34	28.30	
	58-67	7	5.80	
	Above 68	-	-	
	Total	120	100	
Level of Education	No formal Education	19	15.80	
	FSLC	33	27.50	
	WAEC	53	44.20	
	Tertiary Education	15	12.50	
	Total	120	100	
Marital Status	Single	27	22.50	
	Married	79	65.80	
	Divorced	10	8.30	
	Widowed	4	3.30	
	Total	120	100	
Household Size (persons)	0-1	27	22.50	3 persons
	2-3	53	44.20	
	4-5	12	10.00	
	6-7	20	16.70	
	8 and above	8	6.70	
	Total	120	100	
Income (₦)	10,000-30,000	24	20.00	65,000
	31,000-50,000	35	29.20	
	51,000-70,000	41	34.20	
	71,000-100,000	10	8.30	
	101,000-Above	10	8.30	
	Total	120	100	

Source: Field Survey 2021

The types of health extension packages available to fishermen as shown in Table 2 indicated that maternal and child health (95.00%), sensitization on health matters (personal/fishing hygiene) (93.30%)

treatment of infectious diseases (93.30%), family planning guidance (90.00%), malaria treatment and prevention (89.20%), heart attack prevention (88.30%), BP checkup (85.80%), dissemination of

HIV/AIDS health campaign (83.30%), immunization against major infectious diseases (83.30%), management of sexually transmitted diseases (80.80%), prostate cancer diagnosis (80.00%), diagnosis of ailment (79.20%), were types of health extension packages available to fishermen. On the other hand, the following were not much available health extension packages to fishermen; Covid-19 awareness campaign (25.00%), and Covid-19 vaccination (7.50%). The result supported Araya *et al.* (2012), whose study revealed that health extension workers have contributed substantially to the

improvement in fishermen's utilization of health care services like treatment of infectious diseases and HIV testing amongst others. However, their contribution to the improvement in health facility delivery, and health checkup seems insignificant due to some challenges confronting health care delivery. Also, Elenwa *et al.* (2019) and Isife *et al.* (2016) observed in their studies that extension health services available in Khana and Ikwerre local government areas of Rivers State were Bp checkup, family planning guidance, malaria prevention and treatment and sanitization of personal hygiene.

Table 2: Distribution of the types of health extension packages available to fishermen

Types of health extension packages available to fishermen in Bonny	Responses (n = 120)		
	Freq.	%	Ranking
Malaria treatment and prevention	107	89.20	4 th
Sensitization on health matters (personal/fishing hygiene)	112	93.30	2 nd
Treatment of infectious diseases	112	93.30	2 nd
Diagnosis of ailment/ Provision of essential drugs	95	79.20	9 th
Family planning guidance	108	90.00	3 rd
Maternal and child health	114	95.00	1 st
Dissemination of HIV/AIDS health campaign	100	83.30	7 th
Immunization against major infectious diseases	16	83.30	7 th
Management of Sexually Transmitted Diseases	97	80.80	8 th
BP Check up	103	85.80	6 th
Prostate Cancer Diagnosis	96	80.00	8 th
COVID-19 awareness campaign	30	25.00	10 th
Heart Attack Prevention	106	88.30	5 th
COVID-19 Vaccination	9	7.50	11 th
Undertake specific measures to prevent and control local endemic disease e.g. disinfestation and other preventive measures	103	85.80	6 th

Source: Field Survey, 2021

The health extension packages utilized by fishermen as showed in Table 3 indicated that majority of the fishermen agreed that; they utilized; malaria treatment (3.14), sensitization programme on health matters (3.06), treatment of infectious diseases (2.97), diagnosis of ailment (3.13), family planning guidance (3.08), maternal and child health (3.17), HIV/AIDS health campaign (3.06), management of Sexually Transmitted Diseases (STD) treatment programme (3.23), immunization against major infectious diseases (3.08), and disinfestations and other preventive measures offered by health extension workers (3.07). On the contrary, some of the fishermen disagreed that they utilized COVID-19

vaccination (1.98), and COVID-19 awareness campaign (2.07). The implication of the grand mean of 2.85 is that the majority of the fishermen utilized health extension packages available to fishermen; since the grand mean is greater than the 2.5 criterion mean. The findings is consistent with the result from the study of Desta and Basha (2017), which revealed that the major Health Extension Programme services which are delivered by Health Extension Workers were malaria treatment, child immunization and Antenatal Care followed by Postnatal Care, family planning, referral for delivery, diarrhea treatment and health education.

Table 3: Distribution of health extension packages utilized by fishermen

Health extension packages utilized by fishermen	Respondents (n = 120)						Mean	Remark
	SA	A	D	SD	Tot.			
Utilized the malaria treatment programme by health extension workers	50	38	31	1	377	3.14	Agreed	
Utilized the sensitization programme on health matters	14	101	3	2	367	3.06	Agreed	
Utilized treatment of infectious diseases	6	107	5	2	357	2.97	Agreed	
Utilized diagnosis of ailment	55	33	25	7	376	3.13	Agreed	
Utilize the family planning guidance programme by health extension workers	32	73	8	7	370	3.08	Agreed	
Utilize the Maternal and child health	51	41	25	3	380	3.17	Agreed	
Utilize the dissemination of HIV/AIDS health campaign	24	82	11	3	367	3.06	Agreed	
Utilize immunization against major infectious diseases	32	73	8	7	370	3.08	Agreed	
Utilize the management of Sexually Transmitted Diseases treatment programme	55	42	19	4	388	3.23	Agreed	
Utilize the promotion on healthy living habits	16	89	7	8	353	2.94	Agreed	
Utilize disinfections and other preventive measures offered by health extension workers	37	61	15	7	368	3.07	Agreed	
COVID-19 vaccination	1	31	53	35	238	1.98	Disagreed	
COVID-19 awareness campaign	7	29	50	34	248	2.07	Disagreed	
Grand Mean						2.85		

Mean \geq 2.50 = Agreed; Mean $<$ 2.50 = Disagreed

Source: Field Survey, 2021

The way health extension packages utilized by fishermen have helped in community development as showed in Table 4 revealed that majority of the fishermen agreed that; health extension packages have helped fishermen in developing self-esteem, confidence and taking part in decision making in community development (2.93), health extension packages have helped fishermen in participating in social activities in communities (2.98), health extension packages have helped fishermen to maintain a good health hygiene thereby preventing the spread of diseases in the community (3.00), health extension packages have helped fishermen to take care of themselves as well as that of the ones they care about (3.07), health extension packages have helped fishermen to undertake assessment of their health status (3.13), and health extension packages have

helped fishermen in addressing the control of insects and rodents concerns in their homes and the community at large (3.13). The implication of the grand mean of 3.04 is that the majority of the fishermen had utilized health extension packages that have helped in community development; since the grand mean is greater than the 2.5 criterion mean. The result was supported by Araya *et al.* (2012), whose study revealed that HEWs have contributed substantially to the improvement in fishermen's utilization of health care services like treatment of infectious diseases and HIV testing amongst others. However, their contribution to the improvement in health facility delivery, and health checkup seems insignificant due to some challenges confronting health care delivery.

Table 4: Mean distribution of the health extension packages utilized by fishermen that have helped in community development

Health extension packages utilized by fishermen have helped in community development	Respondents (n = 120)						Mean	Remark
	SA	A	D	SD	Tot.			
Health extension packages have helped fishermen in developing self-esteem, confidence and taking part in decision making in community development	40	50	12	18	352	2.93	Agreed	
Health extension packages have helped fishermen in participating in social activities in the communities	43	48	12	17	357	2.98	Agreed	
Health extension packages have helped fishermen to maintain a good health hygiene thereby	44	49	10	17	360	3.00	Agreed	

preventing the spread of diseases in the community

Health extension packages have helped fishermen to take care of themselves as well as that of their loved ones	48	47	10	15	368	3.07	Agreed
Health extension packages have helped fishermen to undertake assessment of their health status	52	46	8	14	376	3.13	Agreed
Health extension packages have helped fishermen in addressing the control of insects and rodents concerns in homes and the community at large.	53	44	8	15	375	3.13	Agreed
Grand Mean						3.04	

Mean ≥ 2.50 = Agreed; Mean < 2.50 = Disagreed

Source: Field Survey, 2021

Relationship between the personal characteristics of the fishermen and the utilization of health extension packages in the study area

There is no significant relationship between the personal characteristics of the fishermen and the utilization of health extension packages in the study area. The result of table 5 showed that the linear regression (R) was 0.84 indicated a very strong relationship between personal characteristics of the fishermen and the utilization of health extension packages in the study area. R^2 was 0.76 indicating that 76% of the variation in the contribution of personal characteristics of the fishermen was included in the independent variable - the utilization of health extension packages in the study area. The variation was as a result of the joint effort of the significant variables of all the personal characteristics of the fishermen (X_1 - X_6). The remaining 16% of the changes were caused by variables not included in the model but captured by the error term. However, the variables X_1 - X_6 , had positive coefficients indicating positive and

very strong relationship between the dependent variable and the independent variables at $p < 0.05$. The implication of this result is that, a unit increase in any of personal characteristics of the fishermen will result to an increase in the utilization of health extension packages in the study area. Given the outcome of these findings, the null hypothesis was rejected; indicating that there was significant relationship between the personal characteristics of the fishermen and the utilization of health extension packages in the study area. The result of study is contrary to the result of Tawari, and Davies (2009), which indicated that there was no significant difference in the relationship between health care delivery utilization and personal characteristics of respondents. The result was also supported by Anum (2015) and Elenwa et al, (2019), whose study revealed that there was significant correlation, was observed between socio-economic characteristics and the utilization of health care delivery.

Table 5: Summary of Linear Regression Analysis on the relationship between the personal characteristics of the fishermen and the utilization of health extension packages in the study area

Model Summary	Parameters	Linear Functions	
	R-value (R)	0.84 ^a	
	R Square (R^2)	0.76	
	Adjusted R Square	0.71	
	Std. Error	3.36	
	Df	113	
	F-ratio	5.13	
	P-value of F-ratio	0.00 ^b	
Coefficient Estimates	Variables	t-values	P-values
Constant	Intercept	7.54	0.00
Gender	(X_1)	4.63	0.00
Age	(X_2)	5.25	0.00
Educational Level	(X_3)	6.34	0.00
Marital Status	(X_4)	7.31	0.00
Household Size	(X_5)	8.21	0.00
Income level	(X_6)	7.74	0.00

Source: SPSS Output, 2021

CONCLUSION AND RECOMMENDATION

The study concluded that there are health extension packages accessed and utilized by fishermen in the study area; such as promotion of physical hygiene

sensitization on health matters, family planning guidance, malaria treatment and prevention among others. These fishermen utilizing these extension health packages have help in the development of the

communities where the live. There was a significant relationship between the personal characteristics of the fishermen and the utilization of health extension packages in the study area. Based on the findings, the study recommended that: health extension workers should make COVID 19 vaccination available for fishermen to utilize and also intensify the awareness campaign on COVID 19 in the study area.

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