ANALYSIS OF OCCUPATIONAL HAZARD OF FISH SMOKING AMONG FISHER-FOLKS IN COASTAL AREAS OF ONDO STATE, NIGERIA PRESENTED BY



Agbebi F.O.
Department of Fisheries and Aquaculture
Ondo State University of Science and Technology, Okitipupa, Nigeria

Email: funmiaquaconsult@gmail.com

Introduction

- > Fish is an important source of protein.
- ➤ It compares favorably with milk, eggs and meat in its amino acid composition.
- ➤ It contains high levels of lysine and methionine both of which are lacking in tuber-based or cereal-based diet.
- ➤ About 90% of the world's fishery catches come from oceans and seas, as against the inland waters.

Introduction cont'd

- Fishing is done on a continuous basis in coastal communities in Nigeria
- ➤ Mostly, bumper harvest is experienced during dry seasons
- Fish is highly perishable due to its high moisture content.
- > A varieties of methods are used in this harvest

Specific objectives

- To determine the socio-economic status of the respondents
- ➤ Determine the income generated from their fish smoking business
- To examine the connection between occupational hazards, labor loss and income generation.
- ➤ Make recommendation based on the findings of the study.

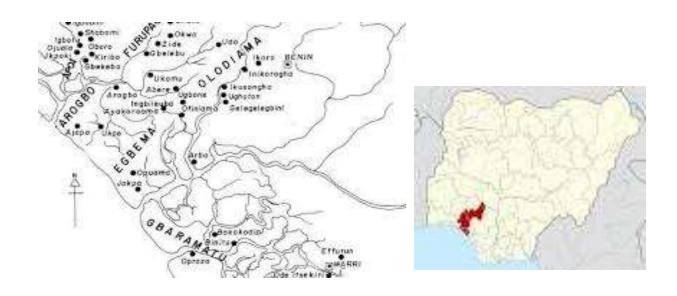
Hypothesis

- ➤ H_O There is no significant relationship between the socio-economic characteristics of the respondents and income loss
- ➤ H_O There is no significant relationship between occupation hazard and loss of income

Methodology

> Study area

The Study was carried out in the Coastal areas of Ilaje local Government, Ondo State, Nigeria



Sampling technique and sample size

- > Two Stage Sampling Techniques was used for the study
- ✓ First stage involves purposive selection of five (5) fishing villages namely;
- Abereke,
- Ayetoro,
- Araromi,
- Ugbo-nla and
- Ilepete
- ✓ Second Stage involves random selection of twenty five (25) respondents from each selected village, making a sample size of 125.

RESULTS AND DISCUSSION

Variables	Number of respondents	Percentage Frequency		
Age				
11-20	15	60		
21-30	30	24		
31-40	45	36		
41-50	20	16		
51-60	15	12		
	Gender			
Male	25	20		
Female	100	80		
Marital status				
Single	15	12		
Married	75 60			
Divorced	17 13.6			
Widowed	18	14.4		

RESULTS AND DISCUSSION (Cont'd.)

Educational level				
No formal education	20	16.6		
Adult literacy school	5	4		
Primary education	80	64		
Secondary education	Secondary education 20			
Household size				
0-5	15	12		
6-10	63	50.4		
11-15	25	20		
16-20	22	17.6		
Level of experience (yrs)				
0-5	10	8		
6-10	70	56		
11-15	35	28		
>15	10	8		

RESULTS AND DISCUSSION (Cont'd.)

	Average income in a month (N) 1USD = N360		
50,000 - 60,000	60	48	
61,000 - 70,000	23	18.4	
71,000 – 80,000	12	9.6	
81,000 – 90,000	13	10.4	
91,000 – 100,000	10	8	
Above 100,000	7	5.6	

TYPES OF HAZARDS AND ITS EFFECTS

PHYSICAL	EFFECTS	
1. Minor cuts, scraps, fall injury, sting from fish spines	Injury is simple and mostly non-fatal. Do not lead to prolonged loss of work if occur. Improper treatment of cut and scrapes areas leads to contamination.	
2. Exposure to heat and cold	At High Temperature -Causes increase in body temperatureheadache. At Low temperature -Frequent respiratory irritation e.g sneezing, coughing, numbness of fingers and toes, blanching of fingers, shock	

TYPES OF HAZARDS AND ITS EFFECTS (cont'd)

Eye hazard and injury	During smoking, direct shoot and smoke causes: - eye redness or blood shoot eyes - itching, mucus discharge or pains - vision problem (blurred vision).
Burns injury, Fall injury (Sprain and fracture)	This affects the epidermal tissue of the skin
Excessive noise and vibration	Causes temporary or permanent hearing damage.
Snake bite	Bite from venomous snake can be deadly

TYPES OF HAZARDS AND ITS EFFECTS (cont'd)

BIOLOGICAL	EFFECTS
1. Leeches and pathogens, nematodes, cestodes and other parasites	All these has adverse effects on humans
CHEMICAL	
1. Smoke from firewood	Causes asthma and other respiratory ailments. Cancer as a result of exposure to polycyclic aromatic hydrocarbons (PAHs)
ERGONOMIC	
1. Internal injuries, broken bone or dislocation, back sprain or strain	Causes: - pain and tenderness - difficult in moving and breathing - swelling or bruising - discoloration of the skin - muscle cramping or spasm

TYPES OF HAZARDS AND ITS EFFECTS (cont'd)

PSYCHOSOCIAL	EFFECTS
Work-related stress included excessive	loss of appetite
working time and over work. Bullying,	disturbed sleep,
which may include emotional and verbal	constantly sulking,
abuse, mental demand	fatigue (muscle fatigue) or loss of energy;
	indecisiveness
	poor concentration

Plate 1: Smoke emission from fish processing unit with resultants pollution of the environment thereby causing hazards to workers and dwellers.



Plate 2: A fish processor working in processing unit without protective gadgets; prone to several injuries.



Plate: Picture of the smoking fire place



Plate4: Picture of smoking been done in an enclosed area



Plate 5: Women smoking fish in a smoke filled environment



Plate 6: Skin burn injury due to fish processor not using hand gloves



Source: www.elginburninjurylawyer.co

Plate 7: An eye injury suffered by a fish processor without protective glasses



Source: www.letsgohealthy.blogspot.com

Plate 8: Fall injury sustained by processor.



Source: www.ibtimes.com

Plate9: Finger infected from fish spine injury



Source: www.emedicinehealth.com/fingerinfection/articleem.htm

Occupational Health Hazard and Income loss of the respondents 1USD = N360

Hazard	Frequency	Percentage (%)	Estimate amount loss (N) per month
Excessive Exposure to heat and cold	123	98.4	15,000
Burns	90	72	18,000
Smoke inhalation	120	96	20,000
Stings and bites	80	64	13,000
Cuts and wounds	100	80	10,000
Broken bone or dislocation	60	48	10,000
Back sprain or strain	115	92	19,000
Eye problem	90	72	15,000
Whitlow	40	32	8,000
Diarrhea	30	24	5,000

Test of Hypothesis

Variable	r value	p value	Remarks
Age	0.657	0.039	Significant
Household size	-0.203	0.574	Not significant
Years of experience	-0.297	0.404	Not significant

Conclusion

- > Hazards and risks have the potential of affecting people and all human activities have this inherent capacity.
- ➤ III health, in addition to productivity loss, can cause large amount of out-of- pocket healthcare expenditure
- This reduces current and accumulated household savings and pushes individuals into impoverishment and poverty.
- ➤ These occupational hazards in the area contributed significantly to the occurrence of work related diseases and significant income loss mainly due to the valuable time lost to sicknesses.

Recommendations

- Government should provide more functional and fully equipped health care facilities to cater for the people.
- The extension workers should educate the people more on safety precautions to reduce to the minimum these occupational hazards.
- Awareness and enlightenment campaign should be adequately embarked upon by different stakeholders in the industry on the use of safety gadgets so as to reduce hazards due to injuries.

Thanks for listening.