PERCEIVED HEALTH STATUS AND SAFETY PRACTICES OF AGRO-INPUT DEALERS IN OYO STATE NIGERIA

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ABSTRACT

The study investigated the perceived health status and safety practices of the agro-input dealers in Oyo State, Nigeria. Using a simple random sampling technique, 144 respondents were sampled from the list of Oyo State Agro-input Dealers Association (OYSAIDA) across the four Agricultural Zones of the State. Structured questionnaire was used for data collection, while descriptive and chi-square statistics were used to summarise the data. Result shows that majority (98.6%) indicated awareness of the use of hand gloves, 93.0% for rubber boots and 97.9% for overall jacket. In the same vein, about 96.1% were aware of the need to wear protective dress/overall when measuring chemicals while 96% were aware that liquid containers should not be opened with the mouth. Majority (64.3%) of respondents recorded a low level of practice of safety measures while only 35.7% of respondents recorded a high level of practice of safety measures. Also, majority (53.8%) of the respondents indicated good health status, while 46.2% revealed poor health status. A significant relationship was found between the level of use of safety practices and the perceived health status of agro input dealers (χ^2=4.700, $p<0.05$). The study concluded that despite the high level of awareness of safety gears and safety practices involved in the handling and storage of agro-chemicals among the respondents, level of use of safety practices by respondents was very low and consequently, a poor health status of a considerable proportion of the agro-input dealers in the State. It is recommended that awareness messages that will ensure adherence to the required safety practices should be advocated. This will reduce the health hazards associated with handling and long term-term effect with the usage of agro-chemicals.

Keywords: Health status, agro-input dealers, safety gears, safety practices

INTRODUCTION

Enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social conditions as the constitution of the World Health Organisation (WHO) ascertains (WHO, 2010). The right to health is the most basic need of all human rights and is a fundamental objective of social and economic development. This means that every individual has the right to live in an environment with minimum health risk and to have access to health service that can prevent and alleviate suffering and help maintain and promote good health throughout the individual's life.

According to Anyanwu (1993), significant proportions of Nigerians do not enjoy a level of health that will enable them to achieve socially and economically productive lives. This may not be unrelated to the general low health and safety practices in Nigeria and its attendant genesis of disease prevalence (Osewa, 2006). This prevalence is in the different sectors of Nigeria's economy including agriculture. According to the International Labour Organisation (ILO, 2009), the agricultural sector is one of the

most hazardous to health worldwide, both developing and industrial countries inclusive. It is ranked as one of the three most hazardous industries together with mining and construction. According to ILO estimates for 1997, out of a total of 330,000 fatal work accidents worldwide, there were some 170,000 casualty among agricultural workers (ILO, 2010).

Agricultural work possesses several characteristics that are risky to health which include exposure to weather, close contact with animals and plants, extensive use of chemicals and biological products, difficult working postures, and long hours and use of agricultural tools, chemicals and machinery. All these pose a serious risk to the health of its stakeholders. One of the stakeholders of agriculture is the agro-input dealers. Agro-input dealers are stakeholders of the agricultural sector. They are of great importance in the sector. Field observation and visits to agro-input dealers' stores and shops have revealed the prevalence of offensive and sometimes choking smell of gases and unknown substances. This can give rise to ailments such as cough, tuberculosis, cancer, skin problems and premature death. Yet, agro-input dealers work under such circumstances for six days a week. Consequently, they are exposed to these gases and unknown substances. Apart from their direct exposure due to lack of protective gears, the agro-input dealers also have indirect exposure to improper hygiene practices such as not washing their hands before meals which may lead to food poisoning. Other hazards faced by the input dealers may lead to loss of lives or disability.

These hazards may be traced to agro-input dealers' lack of awareness and knowledge of safety practices. However, there is limited documentation on the safety practices of agro-input dealers in Nigeria as well as their awareness and knowledge of these safety practices. It is against this background that this study was conceived.

The general objective of the study was to determine the perceived health status and safety practices of the agro-input dealers in Oyo State. The specific objectives were to identify the current safety practices of agro-input dealers in Oyo State, ascertain the level of awareness of safety practices of agro-input dealers in Oyo State, investigate the level of use of safety practices of agro-input dealers in Oyo State, and determine the perceived health status of agro-input dealers.

METHODOLOGY

The study was carried out in Oyo State, Nigeria. The population of the study consists of all agro-input dealers that sell chemicals, such as pesticides, herbicides, insecticides, fertilizer etc. in the State who are members of Oyo State Agro-input Dealers Association (OYSAIDA). OYSAIDA operates in four zones of the State namely: Oyo, Saki, Ogbomoso and Ibadan/Ibarapa. From a list of all registered members of the association, simple random sampling technique was used to select 50% of the members from each of the four zones, thus, 11, 13, 6, and 113 respondents were selected from Oyo, Saki, Ogbomoso and Ibadan/Ibarapa zones respectively to give a total sample size of 143 respondents. The data for this study were collected from primary sources through the use of structured questionnaire containing both open-ended and closed-ended questions. The questionnaire elicited information on respondents' social and personal information, their safety practices and perceived health status.

Perceived health status of the agro-input dealers was operationalised viz the type of diseases affecting the input dealers, their rate of visit to clinic or hospital, treatment, type of drugs often used, number of days absent from shop/store and frequency of occurrence of diseased condition. Respondents identified the diseases affecting them by ticking “yes” or “no” from a list of possible health problems. Frequency of occurrence of the various diseased conditions was determined on a three Likert-type scale of rarely (1), occasionally (2), and always (3). The aggregated scores of the various indicators provided the basis for classifying the respondents into good and poor health status. Respondents indicated their

awareness of safety practices by indicating yes or no to a list of identified safety practices. Respondents' use of safety practices was measured by asking respondents to indicate yes (1) or no (0) to a list of identified safety practices. Mean and above mean scores indicates high use while below mean scores indicates low usage. Descriptive statistics such as frequency and percentages were used to summarise the data collected. Chi-square statistics was used to analyse the relationship between the variables in the hypotheses.

RESULTS AND DISCUSSION

Table 1 reveals that majority of respondents (76.9%) were young people between ages 18-44 years while about 23.1% were between 44-70 years age bracket. Overwhelming proportions (79.7%) were males while only 20.3% were females. This finding is in consonance with Mould (2006) who found that majority (83.3%) of agro-input dealers in Nigeria were males. The predominance of males in the agro-input business suggests that it is a male dominated business venture. This may be due to the hazardous and strenuous nature of the job i.e. carrying heavy cartons of chemicals. Majority of the respondents (56.6%) were married while an appreciable number (43.4%) were single. All the respondents had one form of education or the other. Majority (45.5%) had secondary education while 32.9% and 17.5% had tertiary and primary education respectively. This distribution suggests that all the respondents had at least the basic level of education required to use and observe safety practices in the agro-chemical industry. This finding also corroborates Ikpi and Olayemi (2008) who reported that most of the agro-input dealers in Nigeria have formal education. Also, the result clearly complements the high level of educational status of the country going by UNESCO's report (1995) on standard of education in Nigeria.

A sizeable number (39.9%) of the respondents were retailers, 29% were wholesalers/retailers, 23.1% were wholesalers alone and very few (7.7%) were distributors. The fact that most of the respondents were retailers indicates that majority of them are at risk of health hazards/diseases that may arise from poor handling practices during routine business practices of sales and storage of agro-chemicals.

Table 1: Distribution of respondents by their personal characteristics

Variable	Frequency	Percentage
Age		
18-44	33	23.1
45-70	110	76.9
Sex		
Male	114	79.7
Female	29	20.3
Education		
Primary	25	17.5
Secondary	65	45.5
Tertiary	47	32.9
Others	6	4.2
Business specialization		
Retailer	57	39.8
Wholesaler	33	23.1
Retailer/wholesaler	42	29.4
Distributor	11	7.7

Source: Field survey, 2009

Table 2 on respondents' awareness of safety gears shows that majority of the respondents are aware of almost all the safety gears used in the agro-chemical industry. For instance, about 98.6% indicated awareness for hand gloves, 93.0% for rubber boots and 97.9% for overall jacket. However, only 36.4% were aware of respirators. Poor awareness for respirators might be due to its relatively high cost when compared to other gears. On the whole, one can infer that the awareness of the respondents on safety gears used in agro-chemicals handling is high. The implication is that safety consciously will be promoted among farmers which consequently will ensure healthy living and better productivity.

Table 2 Awareness of respondents on Safety Gears used in the agro-chemical industry

Safety Gears	Awareness	
	Frequency	Percentage
Hand gloves	141	98.6
Nose mask	131	91.6
Rubber boots	133	93.0
Eye goggles	114	79.7
Face mask	121	84.6
Overall/ Protective dress	140	97.6
Hat/Cap	110	76.9
Respirator	52	36.4

Source: Field survey, 2009

Table 3 reveals a high level of awareness of safety practices among the agro-input dealers. This is evident from the overwhelming responses indicating awareness for all the listed safety practices in the agro-input business. For instance, 92% were aware that they need to wash their hands after handling of any chemical while 96.1% indicated awareness for washing and cleaning of gears after use. About 96.1% were aware of the need to wear protective dress/overall when measuring chemicals while 96% were aware that liquid containers should not be opened with mouth. It is obvious that input dealers are properly aware and informed of safety practices required in their business.

Table 3: Distribution of respondents on their awareness of Safety Practices

Safety practices	Awareness	
	Frequency	Percentage
Washing of hand after handling of any chemical	132	92.3
Wearing of protective dress or overall when measuring chemical	131	91.6
Use of face mask or nose mask when dispensing any gaseous chemical	128	89.5
Wearing of rubber gloves when dispensing or handling chemicals	128	89.5
Washing or cleaning of used gears after use	136	96.1
Opening of the windows for proper aeration whenever in the shop/store	127	88.8

Table 3: Cond.

Safety practices	Awareness	
	Frequency	Percentage
Avoid opening of liquid containers with the mouth	137	95.8
Washing of the body immediately, if any accidental touch	133	93.0
Reading of the labels properly before handling	128	89.5
Avoid eating in the store	129	90.2
Proper disposal of empty container	130	90.9

Source: Field survey, 2009

Table 4 on the level of use of safety practices by respondents revealed that majority (64.3%) recorded a low level of practice of safety measures while only 35.7% of respondents recorded a high level of practice of safety measures. This result when compared with the high level of awareness of respondents of the safety practices in their business as indicated in table 2 suggests that respondents are probably negligent or undermining the health dangers they are predisposed to as a result of non-compliance with the safety practices of their business. This implies that a lot is still needed to be done in terms of raising the awareness of the health dangers of undermining the safety practices of handling agricultural chemicals among the agro-input dealers in Oyo State.

Table 4: Level of use of safety practices by respondents

Variable	Frequency	Percentage	Mean
Low	92	64.3	
High	51	35.7	4.62

Table 5 shows the respondents' perceived health status. The mean perceived health status score of respondents is 28. Result shows that majority (53.8%) of the respondents have good health status while 46.2% have poor health status. This is however contrary to Fasola's submission that only very few people (3.3%) engaged in chemical dealings have poor health status (Fasola, 2005). On the other hand, the findings that more than one-third of the respondents had poor health status is probably as a result of their negligence of the routine safety practices as indicated by a low level of practice of safety measures among the respondents in table 4.

Table 5: Distribution of respondents by their perceived health status

Health status	Frequency	Percentage	Mean
Good	77	53.8	
Poor	66	46.2	28

Table 6 reveals a non significant relationship between respondents awareness and use of safety practices (^{2}=12.039, P>0.05). This implies that awareness of safety practices among respondents did not translate to significant improvement in their use of safety practices. Therefore, there is a negative relationship between awareness and use of safety practices among the agro-input dealers in Oyo State. This finding is inconsistent with several theories and past research works that established a positive relationship between awareness and utilization of information/ innovation. For instance, Eniola (2000) reported a positive relationship between information awareness and utilization among citrus farmers in Oyo State. In the same vein, Fasina (2000) established a relationship between awareness and use of innovation among crop farmers in Oyo State. This inconsistence suggest that awareness messages to encourage respondents' compliance to the required safety practices in the agro-chemical industry should perharps focus more on the health dangers and the long-term effect or the gradual diminishing effect on health of the dangers of negligence of respondents to the observance of safety measures of handling agro-chemicals. This is anticipated to produce a better result vis-a-viz the use of safety measures and gears by the respondents.

Table 6: Relationship between respondents' awareness and use of safety practices

Variable	df	χ^2 value	p value	Decision
Awareness and use of safety practices	1	12.039	0.061	Significant

Table 7 shows a significant relationship between the level of use of safety practices and the perceived health status of agro input dealers (^{2}=4.700, P<0.05). Therefore, one can infer that compliance with the required safety practices in the agro-chemical industry by dealers enhance their health status. This implies that efforts to ensure that more agro-chemical dealers comply with the use of safety gears and practices will translate to better health of the citizens.

Table 7: Relationship between Respondents Level of Use of Safety Practices and their Perceived Health Status

Variable	d.f	χ^2 value	p value	Decision
Use of safety practices and perceived health status	1	4.700	0.030	Significant

CONCLUSION AND RECOMMENDATIONS

The study concluded that despite the high level of awareness of safety gears and safety practices involved in the handling and storage of agro-chemicals among the respondents, level of use of safety practices by respondents is very low and consequently, a poor health status of a considerable proportion of the agro-input dealers in the State. It is recommended that awareness messages to encourage respondents' compliance with the required safety practices in the agro-chemical industry should focus more on the health dangers and the long-term effect. The messages should also emphasize the gradual diminishing effect on health of the dangers of negligence of respondents to the observance of safety measures of handling agro-

chemicals. This is anticipated to produce a better result vis-a-viz the use of safety measures and gears by the respondents and consequently, a more improved health status of the agro-input dealers.

REFERENCES

Ajayi A.O. (2006). A Study on Occupational Safety Practices among Rural Farmers in Ile-Ife Area of Osun State, Nigeria: Emphasis on Relevant Training Needs in Research Journal of Agriculture and Biological Sciences, 2(5):227-235, 2006.

Anyanwu, C.N. (1993): "The human commonwealth for humane society". Inaugural lecture, Department of Adult Education, University of Ibadan, Ibadan, p.20.

Eniola, P.O. (2000). Comparative Study of Information Awareness, Access and Utilization by Citrus Farmers in Savannah and Rain forest areas of Oyo State. Unpublished M.Sc. Project, Department of Agricultural Extension and Rural Development, University of Ibadan, Ibadan, p79.

Fasina, O.O. (2000). A Survey of the Use of Pacesetter Organic Fertilizer by Farmers in Oyo Sate. Unpublished M.Sc. thesis, Department of Agricultural Extension and Rural Development, University of Ibadan, Ibadan, p107.

Fasola, M.I. (2005). Health problems of agricultural product carriers in selected markets of Ibadan North Local Government Area of Oyo State. Unpublished B.Sc. thesis, Department of Agricultural Extension and Rural Development, University of Ibadan, Ibadan, p69.

Fawole, O.B. and Olowu T. (2007). IPM Research Project. Phase 1 Country Background paper. (eds) B. Nyambo & A. Youndowei Pesticide Action Network U.K. pp 68-86.

Ikpi, J.K and Olayemi, S. A. (2008). Effects of adoption of improved varieties of cassava stem on income of cassava based farm holdings in Delta State, Nigeria. *Journal of Agriculture and Social Research*. Vol.8, No2. Pp137-143.

Mould A.O. (2006). Technical Capacity of Agro-input Dealers in Advisory Service Delivery to Maize Farmers in Oyo State. Unpublished B.Sc. thesis, Department of Agricultural Extension and Rural Development, University of Ibadan, Ibadan, p78.

International labour Office (2009). Agriculture Child labour by sector. Retrieved September 20, 2010 from www.ilo.org/public/english/standards/relm

International labour Office (2010). Food, Agriculture and Decent Work. Retrieved September 20, 2010 from www.fao-ilo.org/fao-ilo-safety/en

Osewa, S.O. (2006). Occupational Hazard and Safety Practices of Cocoa Farmers in Obokun Local Government Area of Osun State, Unpublished B.Sc. thesis, Department of Agricultural Extension and Rural Development, University of Ibadan, Ibadan, p.49.

UNESCO (1995). List of countries by literacy rate. Retrieved September 20, 2010 from en.wikipedia. Org/wiki/list

World Health Organization (2010). Health and human rights. Retrieved September 20, 2010 from www.who.int/hhr/en