

Evaluation of the Perception and Control measures towards Environmental Risk in Obio Akpor LGA of Rivers State .

ABSTRACT

Aims: To evaluate the Perception and control measures towards Environmental Risk in Obio Akpor LGA of Rivers State.

Study design: Descriptive design

Place and Duration of Study: The study was carried out at the Rivers State Waste Management Agency in Obio-Akpor Local government area of Rivers State between January 2019-March 2019

Methodology: The survey method was employed whilst 265 copies of questionnaire were used to elicit information from the number of employee..

Results: The findings showed that that majority of the respondents under survey had a good knowledge of health risk knowledge and are fully aware of the environmental health risk associated with waste dumping, On Possible control measures it was revealed that majority had the opinion that provision of safety and health structure is the best control measures so as to eliminate health hazard among solid waste workers

Conclusion: RIWAMA should provide sanitary facilities where workers can wash after work to ensure that effective personal hygiene is maintained and also provide the with Personal protective equipment

Keywords: Perception and Environment

1. INTRODUCTION

Solid wastes are generated due to man's activities in search for food or as waste itself after consumption of the food, as these wastes are thrown away in the environment. As population increased on the surface of the earth, as well as civilization onset, the quality and quantity of waste production also changed and increased. The advent of industrialization has altered the nature and quantity of waste generated on a higher level [1].

Residents in the urban centres caused an unprecedented increase in the amount of waste generated without a consequent means of disposing them effectively [2], particularly in developing countries where there is a high risks to the health of the people and workers due to in adequacies of a good waste management disposal system,

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28 Occupational injuries contribute significantly to human and economic costs in developing
29 countries as well as developed countries [3]. They continue to be a serious problem affecting
30 workers at different workplace and industries.

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32 At a globe scale, the international labour Organisation (ILO) estimates that 250million work
33 related injuries and illnesses occur every year and 330,000 of these accidents are fatal. In
34 addition annually, an estimated 160 million people worldwide have work related diseases
35 including respiratory and cardiovascular diseases, hearing loss, musculoskeletal and
36 reproductive disorder as well as mental and neurological illnesses [4]

37 .

38 Although the statistics of occupational injuries are poorly documented in both developed and
39 developing countries, sub-saharan Africa countries appear to have the greatest rate of
40 occupational injuries [5]. Amongst the occupations contributing to these problem is solid
41 waste handling.

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43 Empirical studies on the evaluation of the perception and control measures towards
44 Environmental health risk in Obio Akpor local government area of Rivers state is yet
45 to be documented.

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47 Studies already attempted were most often times streamlined to the health impact on
48 resident neglecting the health workers itself. It is against this background that the aim of
49 this research was to evaluate the perception and control measures towards Environmental
50 Health Risk in Obio Akpor LGA of Rivers State . The specific objectives of the study were to:
51 Evaluate the waste workers perception and opinion on health risk associated with solid
52 waste disposal and to identify the possible control measures that can be implemented to
53 eliminate health hazard among solid waste workers

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55 **2. METHODOLOGY**

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57 The population of the study will consist of the staff of Rivers state waste management
58 agency (RIWAMA). For the purpose of the study the sampling technique adopted was the
59 simple random sampling technique. This technique helped in giving a number to each
60 subject or individual from the open populace putting the numbers in a compartment and
61 picking them randomly. It gives every unit of the population an equal and known chance of

62 being chosen in the sample and it has to do with a definite number of population.
63 Furthermore sampled respondents were given structured questionnaires.

64 The questionnaires were self-administered randomly to selected sample respondents of
65 RIWAMA. The data retrieved from the questionnaire was put together using the statistical
66 package for social sciences (SPSS). For the purpose of a clear and detailed representation
67 of data, the uses of tables were employed in order to present the gathered data for the
68 research study. Descriptive analysis was used which consists of the Mean, Median mode of
69 analyzing

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71 **3. RESULTS AND DISCUSSION**

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73 **3.1 Perception on the environmental health risk associated with waste dumping**

74 To examine the perception of the environmental health risk associated with waste dumping
75 two categories of questions were asked knowledge of the health risk and response on
76 awareness of the health risk

77 **Health Risk Knowledge**

78 **Table 1: Health Risk Knowledge**

Items	Freq.	%
Good Knowledge	145	55
Fair Knowledge	65	25
Poor Knowledge	49	18
No Knowledge	6	2

79 Source: [6]

80 Data analysis as seen in Table 4.9 reveals that majority 55% (145) respondents had good
81 knowledge in health risk knowledge, 25% (65) had fair knowledge and 18% (49) had poor
82 knowledge while 2% (6) had no knowledge about health risk

83

84 **Response on Awareness**

85 **Table 2: Response on awareness**

Item	Freq.	%
Yes	231	87
No	34	13
Total	265	100

86 Source: [6]

87

88 On response to awareness 87% (231) said that they are conscious of the awareness of the
89 environmental health risk associated with waste dumping while 13% (34) indicated that they
90 are not conscious of the environmental health risk associated with waste dumping.

91

92 **3.2 Possible control measures that can be implemented to eliminate health hazard**
93 **among solid waste workers**

94 **Table 3 Control Measures (n=265)**

Items	Freq.	%
Control Measures *		
Training on safe handling of solid waste	164	62
Pre placement of periodical medical examination	78	29
Provision of PPE	198	75
Provision of safety and health structure	216	82

95 Source: [6]

96

97 Data Analysis revealed that majority 82% (216) respondents had the opinion that provision
98 of safety and health structure can be a viable control measures that can be implemented to
99 eliminate health hazard among solid waste workers, 75% (198) opted for the provision of
100 PPE, 62% (164) respondents opted for training on safe handling of solid waste and
101 29%(78) respondents had the opinion that pre placement of periodical medical examination
102 could be a possible control measure that can be implemented to eliminate health hazard
103 among solid waste workers

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105 **4. CONCLUSION – [7] AND [8] TO BE MENTIONED IN DISCUSSION NOT IN**
106 **CONCLUSION**

107 On the perception it was revealed that majority of the respondents under survey had a good
108 knowledge of health risk knowledge and are fully aware of the environmental health risk
109 associated with waste dumping. This result contradicts the finding of [7] while on Possible
110 control measures it was revealed that majority had the opinion that provision of safety and
111 health structure is the best control measures so as to eliminate health hazard among solid
112 waste workers. The results correlate with the findings of [8] who was able to examine the
113 control measures of environmental health hazard

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115 **COMPETING INTERESTS**

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117 Authors have declared that no competing interest exist

118

119 **ETHICAL APPROVAL**

120 Approval for this study was obtained from the Department of geography and Environmental
121 Management, University of Port Harcourt Choba. Also, verbal informed consent was
122 obtained from each respondent. All the participants were informed that the study is voluntary
123 and that they could opt out of the study at any time. Also participants were assured that
124 confidentiality would be maintained during and after data collection and that information
125 given will be used for research purposes only. And lastly articles and authors used were
126 sighted accordingly in this research

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