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2022/2023 PhD Thesis Abstract

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RT: **Effect of Educational-Intervention Program on Adherence to Workplace-Ergonomics Principles among Janitorial and Catering Staff of Selected Universities in Ogun State Nigeria**

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AB: In practice, ergonomics principles and adherence to them remain low in low- and middle-income countries. This poor and low level of adherence to ergonomics principles in the workplace leads to musculoskeletal disorders. Prevention through ergonomics-based educational intervention program offers the best mitigation against musculoskeletal disorders. Researches focused on this strategy are lacking despite reports of ergonomics challenges in the workplace in Nigeria. This research evaluated the impact of an ergonomics-based educational intervention program on the level of adherence to ergonomics principles among janitorial and catering staff of selected universities in Ogun State, Nigeria.

This study utilized a quasi-experimental design. The population of study was 885 janitorial and catering staff of two selected universities in Ogun state, Nigeria. A sample of 60 was systematically derived by selecting every 15th person using the normal distribution power formular for intervention studies and included in an experimental group (EG) and a control group (CG). The EG received an ergonomics-based educational intervention program while the CG received lectures on general infection control practices. The intervention lasted one hour per day per week for three weeks. The study was conducted over a period of twelve weeks. A validated, structured pre-tested questionnaire with Cronbach's alpha coefficients ranging from 0.78 to 0.93

was self-administered by the respondents. Both CG and EG had a 100% response rate. Data was collected at baseline and at 12th week follow-up, and analyzed using descriptive statistics and inferential statistics (paired t-test, effect size) at 5% level of significance.

The mean age of participants was 41.52 ± 9.50 years and of mean normal body weight. In addition, baseline results showed that the control group had a better adherence level (9.80 ± 0.27) compared to the experimental group (7.53 ± 0.32), at $p < 0.05$. Result of t-test analysis revealed a significant difference ($p < 0.05$) at 12th week follow-up period between the control group (3.30 ± 0.37) and the experimental group (9.97 ± 0.30) with a large ES of 3.65, 95% CI (2.81 – 4.48). A result of a paired t-test analysis also showed that there was a significant difference ($p < 0.05$) in the level of adherence within the experimental group between baseline (7.53 ± 0.32) and 12th week follow-up (9.97 ± 0.30).

In conclusion, Ergonomics-based educational intervention program improved adherence to workplace ergonomics principles and should be encouraged among the janitorial and catering staff of Nigerian Universities in order to reduce these debilities among these at-risk populations.

Keywords: Adherence, Educational-intervention, Ergonomics, Musculoskeletal disorders, Workplace-ergonomics principles

Word Count: 399

Abbreviations: RFN: Researcher's Full Name, RD: Researcher's Department, RS: Researcher's School, RE: Researcher's Email, RAE: Researcher's Alternate Email, RP: Researcher's Phone Contact, RT: Registered Title, MS: Main Supervisor, ME: Main Supervisor's E-mail Address, SP: Main Supervisor's Phone Contact, CS: Co-Supervisor, CE: Co-Supervisor's E-mail Address, CP: Co-Supervisor's Phone Contact, AB: Abstract

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