



Prevalence Of Occupational Health Problems Among Bakery Workers In Rivers South East Senatorial District, Rivers State

¹Orisa-Ubi, Charity Ogwueru PhD & ²Onuoha, Innocent Chimecha

^{1,2}Department of Human Kinetics, Health And Safety Studies,
Ignatius Ajuru University of Education, Port Harcourt, Nigeria

¹Email: charilove75@yahoo.com/ 08038882944

²Email: onuohainnocent91@gmail.com/ 08036727222

ABSTRACT

Every occupational Environment such as bakery is associated with various health problems that affect workers health and wellbeing. This study investigated the Prevalence of Occupational Health Problems among Bakery Workers in Rivers South East Senatorial district Rivers State. The study was guided by 4 objectives, 4 research questions and 4 hypotheses. The descriptive research design was adopted with a population consisting of 1,350 bakery workers in Rivers South East Senatorial district Rivers State. A sample size of 407 was determined using the multi stage sampling procedure. Data was collected with a structured questionnaire with a reliability co- efficient of 0.86 and analysis was done using mean, standard deviation, z- test and ANOVA. The result of the study showed that physical health problems prevalent among bakery workers include tiredness ($\bar{x} = 3.81 \pm 0.69$) breathing problems ($\bar{x} = 3.79 \pm 0.70$), muscle and joint pain ($\bar{x} = 3.70 \pm 0.70$) ear problem ($\bar{x} = 3.69 \pm 0.74$) and skin problems ($\bar{x} = 3.65 \pm 0.75$). The mental Health problems prevalent among bakery workers were intimidation and harassment ($\bar{x} = 3.51 \pm 0.78$), poor interaction ($\bar{x} = 3.59 \pm 0.77$), unclear working job ($\bar{x} = 3.50 \pm 0.76$) among others, while the social health problems prevalent among bakery workers included lack of wellness programmes ($\bar{x} = 3.67 \pm 0.47$) lack of social gathering and interaction ($\bar{x} = 3.15 \pm 0.42$) depression ($\bar{x} = 3.06 \pm 0.51$) among others. The tested hypotheses showed no significant difference in occupational health problems based on age [$f(4,382) = 1.60, p < 0.05$] based on gender ($z_{cal} = 1.79, df = 380, p = 0.07$) based on marital status the tested hypotheses showed a statically significant difference in occupational health problems [$f(2, 377) = 1.60; p < 0.05$], while years of work experience showed no significant difference in occupational health problems [$f(3,376) = 3.95; p < 0.05$] It was concluded that there is high prevalence of occupational health problems among bakery workers in Rivers South East Senatorial District. It was recommended among others that bakery managers and supervisors should carry out Continuous training of bakery workers to increase their knowledge on the prevention and management of occupational health problems and bakery workers should be proactive in protecting their health by adhering to safe work processes and adopting safety measure such as use of personal protection equipment.

Keywords: Prevalence, Bakery Workers, Physical Health, Mental health, Social Health, Musculoskeletal disorders, Occupational Health Problems

INTRODUCTION

Certain work places are more hazardous than others based on the level of exposure, work environment and are associated with various degrees of Health problems. Therefore, a bakery is an establishment that produces and sells flour-based food baked in an oven such as bread, cookies, cakes, pasties and pies. Some retail bakeries are also categorized as cafes, serving coffee and tea to customers who wish to

consume the baked goods on the premises. Confectionary items are also made in most bakeries throughout the world (Yogambal 2019).

A baker according to Yossif and Abdelaal (2012) is a worker, who mixes flour, salt, yeast, spices, sugar and other ingredient to prepare dough, sugar filing, etc which are then formed into bread, cakes, rolls etc and baked in ovens. However, baked goods have been around for thousands of years. The art of baking was developed early during the Roman Empire. It was a highly famous art as Roman citizens loved baked goods and demanded them frequently for important occasions such as feast and weddings (Rush and Morgan, 2014). Rush and Morgan (2014) explained that, because of the fame of the act baking, around 300BC, baking was introduced as an occupation and respectable profession for Romans. Bakers began to prepare bread at home in an oven, using mills to grind grain into flour for their breads. The demand for baked goods persisted and the first bakers' guild was established in 168BC in Rome. The desire for baked goods promoted baking throughout Europe and expanded into eastern parts of Asia. This trend became common and soon baked products were sold in streets of Rome, Germany, London, etc. A system of delivering baked goods to households arose as the demand increased significantly. This prompted bakers to establish places where people could purchase baked goods. The first open air market for baked goods was established in Paris, and since then bakeries have become a common place to purchase delicious goods and to socialize (Rush and Morgan 2014). In the Nigerian context, according to Ashong (2021), bakery in Nigeria was started by Amos Shackelford. He was born in 1887 in the maroon community of Charles town in Jamaica. In 1913 jobs on the Nigerian railway were advertised in Jamaica, Shackelford took the opportunity offered and left for West Africa. He arrived Lagos early in 1918 as head clerk at the Nigerian-owned Cumber Company's Thomas and Co. About that time Shackelford went into business with the assistance of his spouse, he set up a bakery on a small domestic scale. This business flourished, and Shackelford introduced new production and marketing methods. The business expanded into other Nigerian towns with Rivers State inclusive and in the 1930s into the Gold coast Ghana. He became known as the bread king. His bread would regularly be delivered to Agege in Lagos, until services were disrupted by independence. It was on this legacy that Alhaji Ayokunnu set up his own bakery, called Agege Bread. Bakeries in general provide services for special occasions (such as weddings, anniversaries, birthday parties, business networking events etc) or customized baked products for people who have allergies or sensitivities to certain foods (such as nuts, peanuts, dairy or gluten, etc). Bakeries can provide a wide range of cakes, layer cakes, wedding cakes etc. Other bakeries may specialize in traditional or handmade types of baked products made with locally milled flour, without flour bleaching agents or flour treatment agents; baking wheat is sometimes referred to as artisan bread (Yogambal 2019). Notwithstanding, some Bakery products includes: bread, bread roll, flatbreads, bagels, doughnuts, muffins, pizzas, buns, pastries, pies, crumpets, tarts, brownies, cakes, cookies, scones, crackers, biscuit among others.

There are categories of Health Problems Prevalent among Bakery Workers such as:

Physical Health and Musculoskeletal Health Problems among Bakery Workers. The Prevalence of Physical Health among Bakery Workers is significant, this is because the work environment and its varied circumstances have both negative and positive effects on the health and safety of its workers for instance, harmful work environment accounts for significant causes of morbidity, mortality and disability (Bhuiyan, 2016). Doaa et'al., (2017), highlighted that bakery possess several physical health problems to the health of its workers. These problems include, fall/explosion, skin irritation, muscle problems, chest tightness, cough, catarrh, sneezing and symptoms of asthma (Joshua et al., (2017). Fashwick et'al., (2011) asserted that physical health problems among bakery workers also include musculoskeletal disorders (muscle pains and arteritis), contact dermatitis from chemicals such as sodium hydroxide and bleach used in cleaning bakeries, chronic obstructive pulmonary disorders (emphysema and bronchial asthma), injures to the eyes, and irreversible hearing damage among others. In addition, employers and employees in the bakery are also exposed to high temperature from ovens and also have to handle hot products. This usually leads to collapse through exhaustive and contact burns (James and Lundy 2015). Because of this, baking as an economic activity exposes workers to work injuries and diseases that affect the production and productivity which translates into low income (Yossif and Abdelaal, 2012). Moreso,

the prevalence of musculoskeletal disorders' (MSDs) varies among bakery workers around the world depending on their determinants. Yong *et al* (2020) reported that 30% of European workers suffer from back pain, and the economic loss caused by back pain in Holland accounts for 1.7% of the national wealth every year. Furthermore, the number of days absent from work due to MSDs accounts for 15%-22% of the total as a consequence of industry-related diseases in the Federal Republic of Germany every year. The direct and indirect economic losses incurred in Canada due to MSDs are as high as nearly 100 billion US dollars every year. Thus, the serious consequences of MSDs have gradually aroused widespread concern in economically developed countries. It was also estimated that 76% prevalent rate of (MSDs) occur among bakery workers in Portugal ranging from wrist/hand (42%), neck (32%) low back (30%) and shoulders (23%) were the most affected body parts. In Denmark, it was reported prevalence of 15% and 5.8% for myofascial pain syndrome and rotator cuff tendinitis respectively among sewing machine operators. The prevalence of moderate to severe musculoskeletal pain in the neck/shoulder region and distal upper extremity were 24% and 16% respectively among machine operators in Los Angeles. A result of a study on ergonomics issues among bakery workers in Botswana revealed a high prevalence of WMSDs with a concluding results that back, neck and shoulder discomfort were highly prevalent among the machine operators surveyed (Maduagwu *et al.*, 2015). There are various factors that can determine musculoskeletal disorders among various groups of occupation. Yong *et al* (2020) outlined that studies have shown, especially in developing countries that individual physical, social, and organizational risk factors are independent predictors of musculoskeletal symptoms, although on their interactions have seldom been explored. Previous studies have shown that physical, ergonomics and psychosocial factors are more likely to lead to pains. Indeed, MSDs can also be induced by adverse psychosocial factors, which in turn have negative effects on psychological and social states and further increase the risk of workers, thus exhibiting a two-way connection and feedback loop between the two. Under cognitive and emotional stress, a longer period of rest time is required to allow muscle relaxation. Although bakery workers are high-risk groups for MSDs, the influence physical, ergonomics, meeting up and psychosocial factors in this group remains to be clarified. There is a wide range of factors, including job demands, job control, job support, social support, and job satisfaction (Tong *et al.*, 2019).

Secondly, Mental Health problems among Bakery Workers is an important factor that affects the operation and wellbeing of bakery Workers. According to Felman (2020), Mental health is the cognitive, behavioural and emotional well-being of an individual. Mental health is all about how people think, feel and behave. People sometimes use the term "mental health" to mean the absence of a mental disorder. Looking after mental health can preserve a person's ability to enjoy life. Doing this involves reaching a balance between life activities, responsibilities and efforts to achieve psychological routine. According to World Health Organization (2014) poor mental health among bakery workers is an important risk factor for physical illness, work-related injuries and absenteeism. In a research by Hilton *et al* (2018) found an 18% increase in absenteeism rates among manual workers reporting high psychological distress. Psychological distress has economic implications for the bakery industry, affecting operational expenses and workers income and savings. Unlike comparable business in developed economies, small and most large scale bakeries lack adequate ventilation and air conditioning, among other basic occupational safeguards. Habib, El-harakeh and Hojeij (2019) added that workers in these bakeries spend long hours in cramped, hot work environments for shifts that can extend beyond 12 hours a day.

In bakeries, there are many risk factors for mental health that may be present in the working environment. Most risks relate to interactions between type of work, the organization and managerial environment, the skills and competences of employees to carry out their work. Risks to mental health include inadequate health and safety policies, poor communication and management practices, limited participation in decision making or low control over one's area of work, low levels of support for employees, unclear Tasks or organizational objectives. Risk may also be related to job content, such as unsuitable tasks for the person's competences or a high and unrelenting workload some jobs may carry a higher personal risk than others (Nahit *et al* 2011). In bakeries, bullying and psychological harassment/also known as mobbing) are commonly reported cause of work-related stress by workers and present risks to the workers

mental health. These health consequences can have costs for employees in terms of reduced productivity and increased staff turnover.

Thirdly, Prevalence of Social health problems among bakery workers is widely neglected this is because the concept of social health is less intuitively familiar than that of physical or mental health and yet along with physical and mental health, but it forms one of the three pillars of most definitions of health. This is partly because social health can refer both to a characteristic of a society and of individuals. The social health of individuals refers to that dimension of an individual wellbeing that concerns how he gets along with other people, how other people react to him and how he interacts with social institutions and societal norms (Hawe and Shiell 2011). In an occupational environment such as bakery, bakery workers need significant close interpersonal connections to be socially healthy. That is while social distancing and its extensions have been hard for so many workers thrive on being able to connect and socialize with closet people. It's important that employers consider measures to assist employees feel connected over passions other than work. Relationship can't be forced obviously, but think of the good it would do them to authentically build their social network.

However, Bakery workers are prone to various social health problems such as heart attack, chronic disease, mobility issues, high blood pressure, raised stress hormones leading to inflammation, cancer, poor mental health, anxiety and depression, poor immune system. According to Indian Journal of Psychiatry (2014), quality and quantity of relationship among bakery workers have an effect on mental and physical health. Loneliness, as it turns out it can even be more dangerous than smoking and cause for concern. To this end, social health in bakery setting can be encouraged via celebrating events together, going beyond happy hour, breaking bread together, creation of group wellness programs etc. social health is the ability of individual to form healthy and rewarding interpersonal relationship with others. In an occupational environment such as the bakery, socially healthy employees are less stressed, more productive, healthier overall, serve their company better, more creative and resilient, have more self-confidence, more loyal to their company and co-workers as poor social health of workers can cause a variety of health problems among bakery workers.

Amidst the prevalence of various categories of Health problems, there are Occupational Health Services for Prevention of Health Problems among Bakery Workers. This is important because In Nigeria, workers in small-scale industries, particularly those in the informal sector have little or no access to occupational health services. Omokhodin (2019) submitted that for this category of workers, more than 60% of the total Nigerian workforce, government hospitals, private general practice clinics, chemist shops and dispensaries are the main sources of health care for their general health problems. Rantanen and Fedotor (2015) opined that, occupational health services for bakery workers should aim to connect with other health professionals outside the bakeries to provide necessary flow of health information and comprehensive health care (preventive, curative, rehabilitative and compensation) they should link health surveillance, for specific hazards and specific diseases with health promotion activities and possible research in occupational health. At a minimum they should include pre-employment examination which aims at assessment of employee's health before the start of employment as a basis for follow-up and recognition of diseases that can affect work ability. Nickels et al., (2019) explained that there may be need to exclude especially susceptible employee's framework that is hazardous to their health such as excluding asthmatics from work with sensitizers such as flour dust, bleach and oven operators. When pre-employment examination was not carried out at the start of employment, there would be no evidence that a worker with occupational asthma did not have asthma before starting work. The employer may avoid payment of compensation to the worker on this ground. However, there is no justification for this, because pre-employment examination should have been done in the place (Nickel's et al., 2019).

Rantanen and Fedotor (2015) contributed that occupational health professionals should provide advice on the adaptation of work to workers by advising the employer and workers on modification of the job, equipment and working environment to allow workers perform their duties effectively and safely. They can provide information and organize health education and training on awareness of hazards, existing risks and ways workers can protect themselves from hazards while emphasizing the responsibilities of employers and employees. However, insufficient knowledge on the management of risks at the workplace

may be responsible for the exposure of bakery workers to hazards and health problems. In Nigeria, it is common place for information on health and safety at workplace to be passed on informally by employers and fellow employees. The formal occupational health units are found mostly in large scale companies while small scale ones cannot afford on-site occupational health clinics. It is the duty of employers to inform employees of workplace hazards, their likelihood occurrence and consequences with measures aimed at controlling them (Isah, Asuzu and Okojie, 2016).

Aim and Objectives of the study

This study investigated the prevalence of occupational health problems among bakery workers in Rivers South East senatorial District, Rivers State. Specifically, the study sought to;

1. determine the prevalence of occupational health problems among bakery workers in Rivers South East senatorial District, Rivers State, Nigeria.
2. investigate the physical health problems among bakery workers in Rivers South East senatorial District, Rivers State.
3. examine the mental health problems among bakery workers in Rivers South East senatorial District, Rivers State.
4. ascertain the social health problems among bakery workers in Rivers South East senatorial District.

Research questions

The following research questions were raised to guide the study;

1. What is the prevalence of occupational health problems among bakery workers in Rivers South East senatorial District, Rivers State?
2. What are the physical health problems among bakery workers in Rivers South East senatorial District, Rivers State?
3. What are the mental health problems among bakery workers in Rivers South East senatorial District, Rivers State?
4. What are the social health problems among bakery workers in Rivers South-East Senatorial District Rivers State?

Hypotheses

1. There is no significant difference in prevalence of occupational health problems among bakery workers in Rivers South East Senatorial District, Rivers State based on age.
2. There is no significant difference in prevalence of occupational health problems among bakery workers in Rivers South East Senatorial District, Rivers State based on gender.
3. There is no significant difference in prevalence of occupational health problems among bakery workers in Rivers South East Senatorial District, Rivers State based on marital status.
4. There is no significant difference in prevalence of occupational health problems among bakery workers in Rivers South East Senatorial District, Rivers State based on years of working experience.

METHODS

The study was conducted in Rivers South East Senatorial District, Rivers State Nigeria. The Senatorial District comprises of Oyigbo, Tai, Eleme, Khana, Gokana, Andoni and Opobo Nkoro Local Government Areas. The descriptive cross-sectional survey research design was adopted for this study and the study population composed of all Bakery workers in Rivers South East senatorial district. The population of Bakery workers in Rivers South East senatorial district was estimated at 1,350 (Rivers State Primary Health care Management Board 2019). The study employed a multi stage sampling procedure was adopted to select the sample. The first stage is stratified sampling technique used to put the senatorial district into five strata which are Oyigbo, Eleme, Khana, Gokana and Tai. At the second stage, the simple random sampling technique was used to select different Bakeries respectively in each of the stratum; the third stage, the non-proportionate sampling technique was adopted in distributing (407) research instrument to 25 Bakeries in urban and semi-urban areas. Data collection was done using a well structured questionnaire titled Occupational Health Problems among Bakery Workers Questionnaire (OHPBWQ). The instrument was validated by the researcher's supervisor and three other experts in the

Department of Human Kinetics, Health and Safety Studies, Faculty of Natural and Applied Sciences, Ignatius Ajuru University of Education and others in related field and has a reliability coefficient of 0.86. The collection of data was done in four weeks and the questionnaires administered were retrieved. Data collected were analyzed with the aid of the Statistical Product for Service Solution (SPSS) version 25.0. In analyzing the data, the descriptive statistics of percentage, mean and standard deviation was adopted to analyze the socio-demographic data and answer the research questions while the hypotheses were tested using the Z-test and Analysis of Variance at 0.05 level of significance.

RESULTS

Table 4.1: Prevalence of occupational health problems among bakery workers in Rivers South East Senatorial District

SN	Occupational health problems	Yes	No	Total	Decision
1	Experienced running nose when at work	267(69.0)	120(31.0)	387(100)	High
2	Regular occurrence of running nose	215(66.0)	172(34.0)	387(100)	High
3	Running nose improves during non-working days	275(71.1)	102(28.9)	387(100)	High
4	Coughs first thing in the morning	293(75.7)	94(24.3)	387(100)	High
5	Coughs during the rest of the day	301(77.8)	86(22.2)	387(100)	High
6	Cough improves during non-working days	311(80.4)	76(19.6)	387(100)	High
7	Had asthma after starting work	113(29.2)	274(70.2)	387(100)	Low
8	Feeling of tightness in the chest	327(84.5)	60(15.5)	387(100)	High
9	Always experiences tightness in the chest	299(77.3)	88(22.7)	387(100)	High
10	Tightness in the chest improves during non-working days	321(82.9)	66(17.1)	387(100)	High
11	Felt shortness of breath at work	98(25.3)	289(74.7)	387(100)	Low
12	Shortness of breath occurs regularly at work	88(22.7)	299(77.3)	387(100)	Low
13	Shortness of breath improves during non-working days	110(28.4)	277(71.2)	387(100)	Low
14	Experienced wrist/hand pain	363(93.8)	24(6.2)	387(100)	High
15	Experienced hip/thigh/buttock or muscle pain due to work over load	355(91.7)	32(8.3)	387(100)	High
16	Experiences pains regularly	371(95.9)	16(4.1)	387(100)	High
17	Difficulty moving shoulder	335(86.6)	52(13.4)	387(100)	High
18	Heard a whistling sound in the ear	291(75.2)	96(24.8)	387(100)	High
19	Whistling sound occurs regularly at work	259(66.9)	128(33.1)	387(100)	High
20	Whistling sound improves during non-working days	311(80.4)	76(19.6)	387(100)	High
21	Experienced itching in the skin when at work	359(92.8)	28(7.2)	387(100)	High
22	Regular occurrence of itching in the skin	333(86.0)	54(14.0)	387(100)	High
23	Itching in the skin improves during non-working days	355(91.7)	32(8.3)	387(100)	High
24	Experienced redness of the eyes	157(40.6)	230(59.4)	387(100)	Low
25	Able to see close/distance items	308(79.6)	79(20.4)	387(100)	High
26	Experienced pains or itching in the eyes while working	293(75.7)	94(24.3)	387(100)	High
27	Itching in the eyes occurred regularly	131(33.9)	256(66.1)	387(100)	Low
28	Occurrence of sexual harassment	264(68.2)	123(31.8)	387(100)	High
29	Experienced sexual harassment always	207(53.5)	180(46.5)	387(100)	High
	Overall	266(68.7)	121(31.3)	387(100)	High

Table 4.1 showed the prevalence of occupational health problems among bakery workers in Rivers South East Senatorial District. The result showed that, 266(68.7%) of the respondents indicated that they experienced the various health problems associated with baking while 121(31.3%) stated that they did not experience. Thus, the prevalence of occupational health problems among bakery workers in Rivers South East Senatorial District, Rivers State was high (68.7%).

Research question two: *What are the physical health problems among bakery workers in Rivers South East Senatorial District, Rivers State?*

Table 4.2: Physical health problems among bakery workers in Rivers South East Senatorial District

SN	Physical health problems	Mean	Std D.
1	Working in the bakery exposes bakery workers to muscle pains and joint pains	3.70	.70
2	Heat and chemicals causes skin problems to bakery workers due to baking activities	3.65	.75
3	Machine sound from mixers, generators and blowers lead to ear problem of bakery workers	3.69	.74
4	Inhaling flour dust causes breathing problems to bakery workers	3.79	.70
5	Bakery activities lead to tiredness among bakery workers	3.81	.69
	Grand mean/S.D.	3.72	0.71

Table 4.2 showed the physical health problems among bakery workers in Rivers South East Senatorial District. The result showed that the physical health problems among bakery workers included: tiredness ($\bar{X} = 3.81 \pm 0.69$), breathing problems ($\bar{X} = 3.79 \pm 0.70$), muscle and joint pain ($\bar{X} = 3.70 \pm 0.70$), ear problem ($\bar{X} = 3.69 \pm 0.74$) and skin problems ($\bar{X} = 3.65 \pm 0.75$).

Research question three: *What are the mental health problems among bakery workers in Rivers South East Senatorial District, Rivers State?*

Table 4.3: Mental health problems among bakery workers in Rivers South East Senatorial District

SN	Mental health problems	Mean	Std D.
1	Intimidation and harassment affects bakery worker	3.51	.78
2	Unclear working job in bakeries affect performance of bakery workers	3.50	.76
3	Long working hours affect bakery workers health	3.65	.78
4	Poor income affects the working output of bakery workers	3.71	.74
5	Poor interaction and worker's handling by bakery owners affects the health of bakery workers	3.59	.77
6	Lack of health and safety polices in bakeries for promotion/ maintenance of bakery workers affects health	3.09	.54
	Grand mean/S.D.	3.50	.72

Table 4.3 showed the mental health problems among bakery workers in Rivers South East Senatorial District. The result showed that the mental health problems among bakery workers included: intimidation and harassment ($\bar{X} = 3.51 \pm 0.78$), poor interaction which affects the health of bakery workers ($\bar{X} = 3.59 \pm 0.77$), and unclear working job ($\bar{X} = 3.50 \pm 0.76$).

Research question four: *What are the social health problems among bakery workers in Rivers South East Senatorial District, Rivers State?*

Table 4.4: Social health problems among bakery workers in Rivers South East Senatorial District

SN	Social health problems	Mean	Std D.
1	Lack of social gathering and interaction among bakery workers affects their health status	3.15	.42
2	Depression is a social problem among bakery workers	3.06	.51
3	Bakery workers are not permitted to celebrate events together due to long working hours	3.06	.42
4	There is lack of wellness programmes	3.67	.47
Grand mean/S.D.		3.23	.45

Table 4.4 showed the social health problems among bakery workers in Rivers South East Senatorial District. The result showed that the social health problems among bakery workers included: lack of wellness programmes ($\bar{X} = 3.67 \pm 0.47$), lack of social gathering and interaction ($\bar{X} = 3.15 \pm 0.42$), Non-celebration of events ($\bar{X} = 3.06 \pm 0.42$), and depression ($\bar{X} = 3.06 \pm 0.51$).

DISCUSSION OF FINDINGS

The findings of the study in Table 4.1 showed that 266 which represent 68.7% of the respondents indicated that they experienced the various health problems associated with baking while 121 (31.3%) stated that they did not experience such. Thus the prevalence of occupational health problems among bakery workers in Rivers south-east senatorial district, Rivers state was high (68.7%). The finding of this study was expected therefore not surprising because absence or poor occupational Health and safety Programs and environmental conditions of some bakeries leads to occupational health problems among bakery workers. The finding of this study is similar to that of Tatipamula & Roa (2021) who worked on Ergonomic Assessment of Work related Discomfort faced by Taiwanese bakery workers which reported high prevalence rate of occupational health problems among bakery workers in Taiwan, ranging from neck pain, upper back, lower back, right for arm, right wrist, hip and lower legs pains respectively, with 80.2% of the study respondent complaining of various degrees of occupational health problems. Also, the finding of this study was in line with that of Ebisam (2014) who worked on occupational Hazards: Prevention of health problems among bakery workers in Benham City. The result of the study revealed that majority of Bakery workers had more than one occupational health problems as common cold; eye inflammation; back pain and headache were prevalent. A condition synonymous to this present study and thus recommended training courses on health problems and prevention and regular screening for all bakeries workers. The similarity between the present study and previous ones might be due to homogeneity of the research theme and respondents.

The result in Table 4.2 showed the grand mean of 3.72 ± 0.71 on the physical health problems among bakery workers in Rivers South East Senatorial District Rivers State. The finding of this study showed the extent of physical health problems prevalent among Bakery workers which included tiredness, breathing problems, muscle and joint, pain, ear problem and skin problems. The finding of this study was expected therefore not surprising because bakeries are characterized with heavy equipment and machineries with loud operational sound. Hence, consistent exposure and utilization of the machineries without personal protective equipment, poor ventilation and medical assessment of bakery workers periodically increases occupational health problems. This finding could be explained by the notion that Health is Incomplete until there is physical fitness which powers agility to earn productivity in an occupational environment. This finding was consistent with that of Yi-land et'al (2020) whose study identified the musculoskeletal disorders among Tawanese's bakery workers which showed the significant effect of physical health problem among bakery waters, including that it could constitute a barrier to baking operation as bakers self report a high proportion of wrist, muscle pairs, skin problems, tiredness and shoulder disorders and can also serve as reference to task rearrangement and redesign. The finding of this study was similar to

other studies including that of Oji (2014) whose research was based on occupational Hazards and Health problems in oral surgery and dentistry at college of medicine. University of Nigeria Nsukka showed that workers are exposed to physical health problem because of the nature of their profession. The finding of the study corroborates with that of Agowa and Annze-Onyia (2014) whose study on assessment of baking industries in developments the common hazards, health challenges and control measures in Aba South Local Government Area Abia State. The study reported element of this research work, ranging with musculoskeletal problems, skin problems and auditory problems which were a part of prevailing physical health problems identified in this study. The similarities between the present study and previous ones might be due to the variables under study.

The result in Table 4.3 showed the mental health problems among bakery workers in Rivers South East Senatorial District. The result showed a grand mean of ($\bar{x} = 3.50 \pm 0.72$) where mental health problems among bakery workers included: intimidation and harassment, poor interaction, and unclear task, poor income, long working hour which affects the mental health of bakery workers. The finding of the study was expected therefore not surprising because bakery workers are subjected to long working hours by the employers in order to meet up production targets, they are harassed and intimidated by bakery supervisor/managers and employers as their income does not justify the level of service given to ensure production. Therefore, the finding of this study could be explained by the notion that attention to occupational health services has gone extinct leading to surge of mental health problems among bakery workers. This finding was in line with that of Nataly et'al (2020) which investigated a study on mental and self-rated health of bakery workers in Lebanon; A national study. The study established the relationship between poverty and health and psychosocial factors such as harassment, poor interaction and unclear working task associated with poor mental health among low bakery workers performing demanding task. Again, the finding of this study was in in line with that of Priyanka, (2020) who worked on occupational health problems of bakery workers in Assam, India. The study revealed bakery workers were exposed to psychosocial problems of verbal abuse, poor interpersonal relationship and long working hours a condition identified prevalent in this present study and injurious to health. The similarities between this present study and previous ones are due to the theme and variables under study.

CONCLUSION

Based on the findings of the study, it was concluded that there is high prevalence of occupational health problems among Bakery workers in Rivers South East Senatorial District. The tested hypotheses showed no significant difference in Occupational Health problems based on Age, Gender, Years of work experience while based on Marital status, the tested hypotheses showed a statistical difference in Occupational Health Problems Prevalent among Bakery Workers in Rivers south east Senatorial District Rivers State.

RECOMMENDATIONS

The following Recommendations were put forward based on the finding of the study:

- a. Bakery workers should be proactive in protecting their health by adhering to safe work processes and adopting safety measures such as use of personal protection equipment.
- b. Bakery managers and supervisors should carry out Continuous training of bakery workers to increase their knowledge on the prevention and management of occupational health problems.
- c. The Bakery authority should ensure periodic medical examination of Bakery workers by qualified medical staff to monitor their health status.
- d. Government should develop mechanisms for inspection of bakeries to ensure compliance to recommended standard of occupational health programs for Bakery workers and baking facility.
- e. The Bakery management should educate bakery workers on the importance of sanitation and hygiene practice to prevent cross-contamination of diseases.
- f. Bakery workers should limit engagement in extra duties and long-working hours which is detriment to their health.

- g. The public should shun acts of discrimination and stigmatization against individuals with physical, mental and Social Health problems rather promote their rehabilitation and recovery process.

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