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TABLE OF CONTENTS

DUSTY PRINT RESOURCES AND ITS HEALTH HAZARD ON LIBRARY STAFF

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Abstract
This study examined the occupational hazards faced by library staff working with dusty print resources in Bayero University Library, Kano. Four research questions guided the study. The research design was a survey. Population of the study comprised Bayero University Library staff with over ten years of working experience totaling 140. Simple random sampling technique was used to select ninety respondents according to their years of working experience. Questionnaire was the instrument used for data collection. It was designed on a four point scale with 17 items. Data collected were analyzed using simple descriptive statistical frequencies, percentages and figures presented in tables according to the research questions that guided the study. The study found that over-exposure of print resources to dust can cause irritation of eyelids, redness of the eye, tearing and pain in the eyes, runny nose, sneezing, coughing, nasal irritation and skin infection to library staff who handle dust infested print resources. The study also found that library staff were not provided with the safety measures that will shield them from these health occupational hazards. The studies therefore recommend that library staff should be provided with personal protective equipment, library windows and doors with a dust-proof net.

Keywords: *Library Staff, Library Resources, Dusty Print Resources, Health Hazard, Bayero University Library.*

Introduction

Library staff are the human resources of a library. Library staff can be categorized into three different groups namely professional, para-professional and non-professional staff or supporting staff. The professional staff of the library are librarians. Librarians are the academic staff of the library. The para-professionals are library officers, library assistants and library attendants. While the non professional/supporting staff are the general duty staff made up of secretaries, porters, cleaners and so on. They can also work in other departments in the university. All categories of library staff work with both print and non-print materials. With constant use, these information resources over time are exposed to environmental factors such as dust.

As the dust settles on the books, journals and newspaper, etc, library staff always come in contact with these books while working with them. In the process of touching the books, the dust may touch their skin, nose and eyes. Depending on the immune system and sensitivity of one's skin, it may cause irritation of eyelids, redness of eyes, tearing, runny nose, sneezing, coughing and other health hazards. In the early 18th century, some studies showed that most, if not all respiratory disorders were associated with library workers' exposure to dust (Lang, 1996; Nazari et al., 2016). According to Isibor and Mamudu (2017) lung cancer, skin problems, respiratory disease, fibrotic disease, autoimmune disease, nasal irritation and cardiac disease are some of the infections contacted by library staff due to long handling and exposure to books, journals and newspapers that are dust infested. The studies further revealed that the library staff who work with dusty books are in real health danger, the range of risks which varies from lung cancer and heart attack to chronic asthma, allergy, and depression, nervous and skin problems.

Statement of the Problem

Source of dust particles is the sand outside the library building which finds its way into the library through the windows, doors, and feet of library users as they walk into the library. When the offices and reading halls are swept, dust settles on the information resources. Similarly, the use of old books and documents can be hazardous to library staff who select, shelf and arrange these

resources for users. It does seem many library staff are not aware of the health hazards associated with constant handling of dust infested information resources in the library. For some people, it could cause lung disease called hypersensitivity pneumonitis. It is an allergic reaction to particles in the dust, and it causes symptoms like coughing and shortness of breath (Fick, 2020). Library staff are thus at high risk because of their exposure to these health hazards virtually on daily basis. It is against this ground that this study was conducted to examine the health hazards associated with handling dust infested print resources among library staff in Bayero University Library.

Objectives of the Study

1. To find out how often library staff have contact with dusty print resources in Bayero University Library.
2. To ascertain whether dusty print resources are harmful to the health of Bayero University Library staff
3. To find out the type of infection library staff contact from handling dusty print resources in this library.
4. To examine the safety measures provided to protect Bayero University Library staff who work with dusty print resources.

Research Questions

These questions guided the study:

1. How often do Bayero University Library staff have contact with dusty print resources?
2. How harmful are dusty print resources to the health of Bayero University Library staff?
3. What type of infection do library staff who work with dusty print resources have in Bayero University Library?
4. What are the safety measures provided to protect library staff who work with dusty print resources in Bayero University Library?

Literature Review

Dust is a common air pollutant generated from different sources and activities. Dust particles vary in size from visible to invisible. The smaller the particle, the longer it stays in the air and the further it can travel. Dust, with both larger and smaller particles, can be the major cause of certain minor ailment as well as some dangerous life-threatening diseases. The larger particles when inhaled may lead to coughing and sneezing. Problems like coughing and sneezing which do not mean any serious health problem sometimes become serious issues to some people over a long period. Sneezing strongly can result in a serious heartbeat situation (World Health Organization, 2018). Moreover, when the eyes are exposed to dust particles it can be extremely dangerous, it can result in many kinds of eye infections and flues. Equally, problems like bloodshot eyes can arise (Fellowgreen, 2014). Smaller or fine dust particles are invisible and are more likely to penetrate deeply into the lungs while ultrafine particles can be absorbed directly into the bloodstream (Isibor & Mamudu, 2017).

World Health Organization (1999) defined airborne dust as an aerosol of solid particles, mechanically produced, with individual particle diameters 0.1um upwards. The fate of any particle after entry into the human respiratory system depends on the nature and size of the particle. Occupational exposure limits have been defined for many individuals on dust. According to Health Regulatory Bulletin (2018), plaster of Paris dust has been assigned a recommended exposure limit of 10mg.m, any dust exposure above that is considered hazardous.

Microorganisms are living agents that cannot be visualized with the unaided eye, but only with microscopes, and these include fungi (moulds) and bacteria. Moulds (fungi) and bacteria moulds are opportunistic microorganisms of ubiquitous nature and the number of identified fungal (mould) species is well over one million (Mueller & Schmit, 2007). Mould spores, which are the means through which fungi are disseminated, are always present in the air as dust (Mueller & Schmit, 2007). Similarly, in storage premises where a large proportion of books and other physically related library materials are stored, there is little airflow and the air is almost stagnant; such conditions aggravate mould contamination because the propagules of fungi in the air settle slowly on surfaces of these resources and start to grow (Lugauskas & Krikstaponis, 2004).

Library Staff contact with Dusty Print Library Resources

The major source of dust in the library according to Bolourchi (2004) are particles carried in the air

and they settle readily on the surfaces they come in contact with, especially when the sand outside the library is disturbed, some of the fine particles are lifted into the air. These fine suspended particles find their way into the library through the windows and doors. Some are tracked into the library by the feet of the library patrons. The circulation of the particles is enhanced by electric fans in the library. They land on the surfaces of books where they accumulate over time until they affect the books and the health of the users. The dust is reintroduced into the air when the library staff and users pick up the books. The particles end up in the upper respiratory tract of library staff and users through inhalation (Isibor & Mamudu, 2017).

Similarly, anyone who is exposed to high level of dust may be affected; the longer one breathes in the dust, the greater the chance that it will affect one's health. In contrast, people with existing respiratory and heart conditions, including smokers, are at greater risk of developing long-term health problems from long-term exposure to high levels of dust on paper (Isibor & Mamudu, 2017). Library staffs in the course of their daily routine duty handle books and periodicals infested with dust. There are three routes through which hazardous substances usually enter the human body. These are by ingestion (through the mouth), respiration (through breathing), and through the infection of cuts or openings in the skin. However, the possible harm the dust may cause to one's health is mostly determined by the amount of dust present in the air and how long someone has been exposed to it (Isibor & Mamudu, 2017). Occupational exposure to dust, gases, fumes, chemicals, sudden temperature changes and psychosocial stress in the workplace were identified as risk factors for respiratory infections (Hnizdo & Storey, 2010; Runeson-Broberg & Norbäck, 2014; Almiraji et al., 2015, EHS, 2019; Maura, 2021). Occupational exposures were estimated to account for about 9.7% (5.1–14.6%) of the total disease burden from asthma in 2015 (IHME, 2016). Common species of mould often encountered in libraries include: *Aspergillus niger, A. flavus, A. japonicas*, *Cladosporium cladosporioides, Penicillium chrysogenum, P. citrinum, P. janthinellum, P. janczewskii, Curvularia and eragrostidis* (Borrego et al., 2017). The wide spectrum of diseases caused by this species can be attributed to the relatively large size of its spores which get stuck in the upper respiratory tract, causing severe respiratory complications. The toxins produced by these moulds can suppress the immune system; affecting the lymphoid tissue and the bone marrow. Besides inhalation through the respiratory system, toxins excreted by moulds may also infect library users through oral contamination (Isibor, & Mamudu, 2017). Library staff are known to work with the print resources all through their work days, thus they need personal protective equipment. Dust particles small enough to be inhaled may cause: irritation of the eyes, itchy skin with associated rashes, coughing, sneezing, hayfever and asthma attack (Isibor, & Mamudu, 2017).

Library staff with respiratory conditions like asthma, chronic obstructive airways disease (COAD) or emphysema even small increases in dust concentration can make their symptoms worse. Therefore, breathing in high concentrations of dust over time is said to reduce lung function in the long term and contribute to disorders like chronic bronchitis and heart and lung disorders (Fox & Howlett, 2008). In addition, older and immuno-compromised people (particularly asthmatic patients) are highly susceptible to the consequences of mould infections which include hay fever, cold or flu-like symptoms, coughing, sneezing; sore; irritated, and itchy throat; rhinitis; nasal congestion; sinus congestion; recurrent headaches; uneasy breathing, and wheezing (Cohen, 2011; Chadeganipour et al., 2013).

Dusty print resources are harmful to the health of library staff, the involvement of library staff with dusty print resources are connected with packing and shelving of used books and periodicals. This is the daily routine and practice of many library staff and it happens on daily basis. Print resources attract dust, dust attracts mould, fungi and bacteria while, dust encountered on books, journals and newspapers is assumed to contain some level of pathogens. When you open a dusty book, an air current is created which pushes up the dust accumulated on and within the books directly into someone's nose. That means the dusty print library resources are harmful to the library staff's health (Bolourchi, 2004).

The process of abrasion occurs when the fine particles on the surface of library materials are acted upon by circulating air and gravitational force simultaneously. While the force of the air tends to move them horizontally on the surfaces, the force of gravity tends to keep them in the same spot. The result is the generation of minute frictional forces causing wear and tear on the surface of the materials. The degree of abrasion is a function of the amount of dust deposition and its duration (Pasquarella et al., 2015). When both factors are optimal, the consequence on the material is severe.

Furthermore, dust deposition works in concert with moisture in the air which produced several gases in the air for instance, oxides of carbon, sulfur, and nitrogen have a corrosive effect on book materials. The severity of the effect depends on the level of air pollution and the proximity of the library materials to the source of pollution (Pasquarella et al, 2015). Isibor and Mamudu added that bacteria is another complicated micro-organism and can cause ill-health in humans and the mechanisms which cause disease or infection are varied:

1. Some bacteria cause allergies just by their presence since the human body reacts to the bacteria as "foreign" cells.
2. The enzymes which bacteria produce can cause harm to human tissue.
3. Bacteria have two groups of by-products which are classified as toxins. One group affects human hosts while the bacteria are alive; the second group becomes a hazard when the bacteria die. So, they can be a health risk from both newly contaminated paper and paper which was exposed to living bacteria for a long ago.

Isibor and Mamudu (2017) maintained that prolonged exposure to dust and mould can increase a person's sensitivity until the body can no longer tolerate what was not once a health problem become a serious health issue, most especially for people who work in libraries and archives. Stale air in many libraries and records repositories contributes to health risks especially when ventilation is inadequate, and when air filters are not properly selected or maintained, the adverse effect of dust and mould are increased.

Safety Measures to Handle Dusty Print Library Resources

According to Health Regulatory Bulletin (2018) in general, dust risks can be eliminated by being careful, and by recognizing your limits. Following these guidelines would prevent the ingestion of potentially harmful materials:

1. After handling suspected books and manuscripts, wash hands with soap and water before eating, drinking, smoking, or applying cosmetics.
2. After reading or doing research on the library resources make sure you wash your hands before preparing or serving food, especially for female library staff.
3. If you have not changed your clothes since handling the suspect papers, avoid eating crumbs of food which have fallen on your clothing.
4. Do not lick your fingers! Some people have the habit of wetting a finger to "thumb" through a book or a stack of papers. This is bad for the paper, as well as being risky behaviour.
5. Keep suspect paper away from library users. They will not be cautious with the materials, and they might even use the book.

The following preservative measures should be taken to ensure the protection of library materials from particulate matters.

1) The library doors should be kept closed at all times and the windows should be dustproof with nets having a very small mesh size (as low as 0.25 μm). This is very important to filter the dust particles and prevent them from entering the library.
2) The windows should be kept closed while the indoor temperature is regulated with an air conditioner. The windows should only be opened to regulate the relative humidity.
3) Library staff should ensure that visitors remove dust from their feet before entering the library. Information should be made available to library users to sensitize users on the need to remove dust from their feet and its implications for library staff's health.
4) Library materials, floors, surfaces and furniture should be cleaned regularly (at

least four times a week) and a face mask should be worn during the cleaning (Isibor & Mamudu, 2017).

Isibor and Mamudu (2017) added that respiratory problems can result from breathing dust, mould spores, bacteria toxins, and other substances. The respiratory route of exposure can be controlled by providing the correct working environment and an adequate dust mask.

1. If you choose to clean books and manuscripts which are contaminated, it is best to work in a laboratory fume hood. This equipment circulates a lot of air past the workspace, and hazardous materials are pulled away from your body. (Remember that a spray booth is not an adequate substitute for a laboratory fume hood. Working outdoors is the second-best choice. At least there is a large volume of fresh air, and there might be a breeze. Be sure to work so that debris is blown away from your body.
2. Dust masks filter the air that you breathe, and eliminate larger particles. Do not trust the gauze masks which can be bought in retail stores. These do not filter smaller particles such as mould spores. For complete safety, you must purchase respiratory protection which is approved by NIOSH (the National Institute for Occupational Safety and Health) for use around the specific hazard that you are trying to avoid (National Institute for Occupational Safety and Health, 2018).

According to World Health Organization (1999), cuts and skin breaks are the routes of infection. Wearing plastic gloves can prevent this third route of exposure to hazardous substances. Acceptable gloves are made from thin polyethene or latex, or you can use the thicker gloves sold for dishwashing and house cleaning. Be aware that these gloves act as physical barriers to protect the skin. They also advised that, when library staff's hands are contaminated by hazardous materials, they should wash their hands immediately so as not to rub it on their eyes.

Fellowgreen (2014) recommended the following administrative controls of dust in workplaces.

- Provide training and information to workers on the hazards, risks and controls of dusty tasks, as well as supervision for workers regularly.
- Limit the duration and magnitude of exposure to dust (e.g. work rotation and job task changes).
- Ensure work schedules have adequate rest periods to limit exposure.
- Change the location of dumping operations or modify blasting programs to suit weather conditions.

Safety Measures for Libraries on Handling Dusty Print Resources

The literature revealed that most developed nations have the Department of Environment Regulation (DER) and Environmental Protection Agency (EPA) that monitors and enforces standards. The DER monitors air quality, including dust, across the metropolitan and major rural areas. The DER investigates all incidents where the standards are exceeded. The DER licenses all industries and activities that emit pollutants into the environment. Either the DER or EPA can impose conditions on a company that restrict the number of dust particles that their activities can emit into the air (Department of Environment Regulation, 2018). A large proportion of one's lifetime is spent in the workplace, leading to potential long-term and continuous exposures. Special challenges to occupational health include the large share of informal workers and the increasing impacts of an ageing workforce (World Health Organization, 2018)

The library management committee globally listed the following preservative measures for libraries:

1) The library doors should be kept closed at all times and the windows should be dustproof with nets having a very small mesh size (as low as 0.25 μm). This is very important in order to filter the dust particles and prevent them from entering the library.
2) The windows should be kept closed while the indoor temperature is regulated with an air

conditioner. The windows should only be opened to regulate the relative humidity.

3) Library staff should ensure that visitors remove dust from their feet before entering the library. Information should be made available to library users to make them aware of this.
4) Library materials, floors, surfaces and furniture should be regularly (at least four times a week) cleaned, and a face mask should be worn during the cleaning (World Health Organization, 2018; Isibor & Mamudu, 2017; Health Regulatory Bulletin, 2018). The respiratory route of exposure can be controlled by providing the correct working environment and an adequate dust mask in the workplace to protect every library staff that will come in contact with dusty print resources.

Methodology

The research design was a survey. Population of the study comprised Bayero University library staff with over ten years of working experience. According to Bayero University's (2019) annual report, there are one hundred and forty (140) library staff. The sample selected for the study comprised staff with ten years working experience and above. Simple random sampling technique was used to select ninety respondents according to their years of working experience. Participants with 10 years and above were 90 (64%) in number and were used for the study. 17 are academic librarian and 73 were para-professionals. Questionnaire was the instrument used for data collection. It was designed into four sections with 17 items. Data collected were analyzed using simple descriptive statistical frequencies, percentages and figures presented in tables according to the research questions that guided the study.

Result and Discussion

Research Question 1: How often do Bayero University Library staff have contact with dusty print resources?

Table 1: Bayero University Library staff engagement with print library resources

Staff Daily Routine	**Library Units**						**Total**
	circulation	Reference	Reserve	Serials	Documents	Arabic	
Daily	70	35	50	25	55	40	275
Weekly	490	245	350	175	385	280	1,925
Monthly	2,100	1,050	1,500	750	1,650	1,200	8,250
Yearly	25,620	12,810	18,300	9,150	20,130	14,640	100,650
Total	28,280	14,140	20,200	10,100	22,220	16,160	111,100

Source: Field Work, 2021

The analysis in Table 1 shows the daily, weekly, monthly and yearly periods of librarians' engagement with print library resources. It is clear from the table that all library staff both academic and para-professional have contact with 275 (books/periodicals) daily. Also, the table reveals the monthly engagement to be 1,925. This shows that library staff are constantly involved with print library resources which is their primary duty. In the course of performing these operations, they are directly in contact with books and periodicals requested by the users. Apart from that every library staff must return used books and journals back to the shelves which also increases their contact with print library resources and expose them to dust that has accumulated on the resources. Library staff perform these daily activities without any occupational safety equipment. This study is in contrast with the National Institute for Occupational Safety and Health (2018) that, if you choose to clean books and manuscripts which are contaminated, it is best to work in a laboratory fume hood. This equipment circulates a lot of air past the workspace, and hazardous materials are pulled away from your body. The equipment is not even available in the library, this exposes the library staff's health to dust hazards.

Prolonged exposure (every day, for years) can mean that allergies develop with relatively low level of airborne dust and mould. Furthermore, Isibor and Mamudu (2017) opined that respiratory problems can result from breathing dust, mould spores, bacteria toxins, and other substances that have settled on physical resources. On the contrary, observation has shown that library staff are not provided with a dust mask, hand glove and protective dust coat to wear during their daily routines. The result shows that library staff that have contact with the print library resources over a long period can be infected with dust on paper and therefore need to be protected by occupational safety law.

Research Question 2: How harmful are dusty print resources to the health of Bayero University Library staff?

Table 2: How harmful are dusty print resources to library staff

Dusty print resources are harmfulness on the health of the library staff	Very much harmful	Much harmful	Harmful	Not harmful
Academic Library staff	20(25%)	03(3.75%)	01(1.25%)	01(1.25%)
Para-Professional Library staff	26(32.5%)	07(8.75%)	05(6.25%)	02(2.5%)
Library Assistances	10(12.5%)	05(6.25%)	02(2.5%)	01(1.25%)
Total	56(70%)	15(18.8%)	08(10%)	04(5%)

Source: Field Work, 2020

Analysis of the data obtained shows that majority of the respondents 56 (70%) indicated that dusty print resources are very harmful to their health. While only 4(5%) of library staff responded that it was not harmful to their health. The result agrees with Fox and Howlett's (2008) comment that, people with respiratory conditions like asthma, chronic obstructive airways disease (COAD) or emphysema increases in dust concentration can make their symptoms worse. Currently, there is no empirical evidence to prove that dust causes asthma, however, breathing in high concentrations of dust over time may reduce lung function in the long term and contribute to disorders like chronic bronchitis and heart and lung disorders. Isibor and Mamudu (2017), explained that when dealing with book-related problems, there are three routes by which hazardous substances usually enter the staff body. These are by ingestion (through the mouth), respiration (through breathing), and through the infection of cuts or openings in the skin. The type and size of a dust particle determine how toxic dust can be. However, the possible harm the dust may cause to staff health is mostly determined by the amount of dust present in the air and how long they are exposed to it. This indicates that dusty print resources can be an occupational hazard on library staff who work with books and periodicals daily.

Research Question 3: What type of infection do library staff who work with dusty print resources have in Bayero University Library?

Table 3: Types of infection library staff who work with dusty print resources encounter

Types of Infections Library Staff contacted through Dusty Print Resources	Academic Librarians	Para-professional	Percentage %
Irritation of the eyes	10(11.1%)	70(77.7%)	80(100%)
Itchy skin with associated rashes	14(15.5%)	32(35.6%)	46(51.1%)
Coughing	17(20%)	72(30%)	89(97.9%)
Sneezing	17(17.9%)	73(80%)	90(100%)
Hayfever	2(2.2%)	15(16.7%)	17(18.9%)
Asthma attacks	1(1.1%)	4(4.4%)	5(5.6%)

Source: Field Work, 2021

Result in Table 3 shows that majority of the respondents 90 (100%) were infected with sneezing, followed by coughing 89(97.9%). A total of 54(68%) respondents reported irritation of the eyes while 46 (51.1%) of the respondents experienced Itchy skin rashes. 17(18.9%) respondents indicated they had hayfever whereas 5(5.6%) of the respondents had asthma attacks which are extreme cases. The result is similar to the finding of Isibor and Mamudu (2017). They confirmed that dust particles small enough to be inhaled may cause: irritation of the eyes, itchy skin with associated rashes, coughing, sneezing, hayfever and asthma attacks. This indicated that dusty print resources are occupational hazard to the health of those who work with dusty books and periodicals daily. Also, dust associated with books and manuscripts can cause mild, moderate, and severe allergic reactions (World Health Organization, 2018). This indicated that library staff in one way or the other gets infected in the performance of their duty in the library.

Research Question 4: What are the safety measures provided to protect library staff who work with dusty print resources in Bayero University Library?

Table 4: Safety measures for the protection of library staff

Safety Measures provided by Bayero University Library Management to Protect Library Staff when in contact with Dusty Print Resources.	Available	Not Available
Library windows with dustproof net	00(00%)	90(100%)
Library windows with net	30(33.3%)	70(77.7%)
Visitors and library users remove dust from their feet before entering the library	00(00%)	90(100%)
Materials for cleaning: Library materials, floor surfaces and furniture	60(66.7%)	30(33.3%)
face mask	00(00%)	90(100%)
thick /soft hand glove	00(00%)	90(100%)
training and information for library staff on the hazards, risks and control of dust	00(00%)	90(100%)
Job task change	5(5.6%)	75(83.3%)
Environmental protection agency monitoring team	30(33.3%)	50(55.6%)

Source: Field Work, 2021

Table 4 presents the safety measures put in place by the government and library management against dusty print resources. The result shows that 90 (100%) of the respondents indicated that the library windows and doors do not have a dust-proof net. 30(33.3%) of the respondents agreed that Bayero University Library windows and doors have nets but are not dustproof, and only the ground floor windows have net. Also, some units' entrance doors have nets that are not dustproof. 60(66.7%) of the respondents indicated that there is an adequate supply of cleaning materials for library floor surfaces and furniture. 30(33.3%) of the respondents show that the university environmental protection agency monitoring team occasionally visits the library. 90(100%) of the respondents indicate that visitors and library users do not remove dust from their feet before entering the library. This can bring a lot of sand into the library, especially during the rainy season. Similarly, majority of the respondents indicated that the following safety materials were not available in the library: face mask, thick /soft hand glove, training and information on the hazards, risk and control of dust and the need for limited exposure to dust.

In this study, there was no laboratory experiment carried out on dusty print resources to announce an occupational hazard but, the literature reviewed has shown that the particle dust contains microbial agents that account for the most common exposure to respiratory diseases. The result also shows that the longer the years of working experience, the tendency of library staff's exposure to dusty print resources. It also revealed that every library staff that served the library for ten years and above has at one time consciously or unconsciously been infected with skin rashes, red eyes, sneezing, coughing and in most serious cases asthma. Library staff through self-education must learn more about

the protective measure to take every day, especially when dealing with dusty print resources.

Recommendations

1. It is, therefore, recommended that the library management should provide face masks, and thick/soft hand gloves to wear when retrieving and returning books and periodicals to the shelves. As per shelve reading and picking of resources from the store or archives, staff should be provided with full personal protective equipment to protect them completely from exposure to dusty print resources. Also, the library management should provide the necessary cleaning equipment such as a blowing machine, and a protective dust net on the library's windows and doors and general dusting should be consistently done weekly instead of yearly.
2. The librarian Registration Council of Nigeria should put in place written safety measure guidelines or policies as regards the occupational workplace hazard in handling dusty print resources on library staff. As they have been suffering silently over the years from the hazards caused by dust and this has left some library staff permanently ill. The government should provide library staff with occupational hazard incentives to cater for worst case scenario from dust exposure.

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