

## **Knowledge, Attitude and Health Practices of Hospital Staff Towards Nosocomial Infections in Abeokuta Metropolis of Ogun State**

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### **Abstract**

*This study examined the knowledge, attitude and health practices of hospital staff towards nosocomial infections in Abeokuta metropolis of Ogun State. The research work adopted the use of primary data in order to investigate into the research topic. A total of one thousand and eighty three (1083) questionnaires were administered to obtain information directly from respondents working in four (4) public hospitals in Abeokuta metropolis selected using disproportionate sampling techniques. Simple percentage was used to analyze demographic information while regression analysis was used to test stated hypotheses. Self-structured questionnaires, NIQ ( $r=0.82$ ), KHSQ ( $r=0.782$ ), AHSQ ( $r=0.813$ ) and HPHSQ ( $r=0.844$ ) were used. six hypothesis were tested at 0.05 level of significance using multiple regression analysis. On the job training will significantly influence knowledge of hospital staff towards nosocomial infections  $F(2134.988)$ ;  $R(0.815)$ , hospital awareness programmes will significantly influence knowledge of hospital staff towards nosocomial infections  $F(3487.264)$ ;  $R(0.874)$ , overconfidence will significantly influence attitude of hospital staff towards nosocomial infections  $F(2753)$ ;  $R(0.847)$ , fear of being infected will significantly influence attitude of hospital staff towards nosocomial infections  $F(11110.204)$ ;  $R(0.955)$ , level of personal hygiene will significantly influence practice of hospital staff towards nosocomial infections  $F(2337.941)$ ;  $R(0.827)$ , good hospital management will significantly influence practice of hospital staff towards nosocomial infections  $F(4404.866)$ ;  $R(0.896)$ . Based on findings, knowledge, attitude and health practices of hospital staff have a significant role to play in the prevalence of nosocomial infections in Abeokuta Metropolis of Ogun State. The study recommended that it is necessary to review the current infection control practices in all hospitals particularly in developing countries including Nigeria so as to incorporate molecular*

*techniques which have been proven to be effective in keeping the spread of nosocomial infections under check. It was also recommended that hand washing and other standard infection control practices should be adhered to so that nosocomial infections can be controlled effectively.*

**Key Words:** Knowledge, Attitude, Health Practices of Hospital Staff, Nosocomial Infections, Abeokuta Metropolis, Ogun State.

### **Introduction**

The history of nosocomial infections can be traced to the origin of hospitals themselves and have been defined by the WHO as infections that develop in a patient during his/her stay in a hospital or other types of clinical facilities which were not present at the time of admission. According to Samuel, Kayode, Musa & Salami (2010), these infections usually become clinically apparent either during hospitalization or after discharge and as such, organisms that cause these infections are termed nosocomial pathogens. Furthermore, their study reported that infections acquired by staff or visitors to the hospital or other healthcare settings may also be considered as nosocomial. Several reports including the WHO (2008) revealed that the frequent use of antibiotics in hospitals has created selective pressure which has caused most micro-organisms to develop resistance coupled with some medical procedures especially those that bypass the body's natural protective barriers and cross contamination from patients to hospital staff as well as inadequate cleaning procedures concerning uniforms, washing, sterilization of equipment and other preventive measures that may be ignored, thus, providing a route for nosocomial infections to spread.

Nosocomial infection is one of the leading causes of death and increased morbidity for hospital staff in Nigeria (Balabare, Danjuma, Omoniyi & Haruna 2006). The World Health Organization (WHO) (2008) established that the rate of nosocomial infections among hospital workers will continue to rise as a result of four factors which include: Crowded hospital conditions, increasing number of people with compromised immune system, new microorganisms and increasing bacterial resistance. Similarly, Toni and Lee-Culvert (2014) identified the following risk factors as the causes of nosocomial infections: prolonged hospital stay, severity of underlying illness, compromised nutritional or immune status, use of indwelling catheters, failure of health care workers to wash hand between handling of patients or before any procedure and prevalence of antibiotic resistance bacteria from a prolonged use or misuse of antibiotics.

Nosocomial infections among hospital staff are commonly cause by bacteria. It can also be caused by viruses, fungi and parasites, but these types of infection occur less frequently, especially those caused by parasites. For example scabies often do not carry the same morbidity and mortality as bacterial infections. Viral nosocomial infections are more common in young hospital staff than in adults hospital staff and carry a high epidemic risk and fungal nosocomial infections frequency occurs during prolonged treatment with antibiotics and in hospital staff who have compromised immune systems WHO (2008).

The knowledge of a hospital staff concerning the risk of nosocomial infections is very important, especially those whose job description requires them to clean health facilities. This knowledge plays a critical role in ensuring that the health worker adheres to rules that will lead to the reduction in risks of being infected with hospital related infections. Pruss, Kay, Fewtrell & Salami (2009) asserted that effective training and having a positive attitude and commitment towards control and prevention of nosocomial infections helps reduce the incidence of hospital associated infection among hospital staff.

However, compliance to stipulated rules and regulations concerning hospital practices could be ignored due to poor negative attitude of a hospital staff which increases his/her risk of being infected with nosocomial infections. Ward (2012) reported that student nurses who showed negative attitude towards hand hygiene suffered nosocomial infections, also doctors and many qualified nurses showed similar negative attitudes.

Health practices provide guidelines to all health personnel when dealing with potential areas that may lead to spread or acquiring of infections in a hospital. Oosthuysen, Potgieter and Blignaut (2010) explains that there are important infection control practices for hospital workers: namely knowledge of infectious occupational hazards, personal hygiene and care of hands, correct application of personal protective equipment, use of environmental barriers and disposable items, disinfection, and management of waste disposal, which help reduce incidence of nosocomial infections. Prevention of health care-associated infections is the duty of all health care workers. Infection control professionals require evidence-based educational content that facilitates reduction in nosocomial infections. It is against this background that this study will examine the knowledge, attitude and health practices of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

### **Hypotheses**

The following hypotheses were tested in the course of the study;

1. On-the-job training will not significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State
2. Hospital awareness programmes will not significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State?
3. Over-confidence will not significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State
4. Fear of being infected will not significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State
5. Level of personal hygiene will not significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State
6. Good hospital management will not significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

### **Methodology**

This study was a descriptive survey research design. This method was selected in order to obtain first hand information directly from the respondents which would be subjected to statistical analysis for relevant inferences to be made. The population for this study comprises of all public hospital staff in Abeokuta Metropolis of Ogun State, Nigeria.

The sample for this study was one thousand and eighty three (1083) male & female public hospital staff in Abeokuta Metropolis of Ogun State. The disproportionate sampling technique was adopted for this study, which is a way of drawing samples based on the researcher's knowledge of the population. The number of participant from each subgroup is determined by their number relative to the entire population. In view of the large number of staff in public hospitals in the study area, all the population cannot be used in the course of this research. Abeokuta Metropolis of Ogun State consists of four public hospitals, with the following staff strength:

| S/N          | Public Hospitals                          | Staff Strength | Percentage (%) | Selected Respondents |
|--------------|-------------------------------------------|----------------|----------------|----------------------|
| 1.           | Federal Medical Centre (FMC), Idi Aba     | 1426           | 35%            | 499                  |
| 2.           | State Hospital (General Hospital), Ijaiye | 1018           | 25%            | 255                  |
| 3.           | Neuropsychiatric Hospital, Aro            | 911            | 22%            | 200                  |
| 4.           | Olikoye Ransome kuti Memorial             | 715            | 18%            | 129                  |
| <b>TOTAL</b> |                                           | <b>4,070</b>   | <b>100</b>     | <b>1083</b>          |

The following self-developed instruments was used for the study:

### 1) Nosocomial Infections Questionnaire (NIQ)

The Nosocomial infections Questionnaire was a self-developed questionnaire. It was developed for the purpose of this study to elicit information from the respondents on Nosocomial Infections. It was divided into three sections. Section A, will include demographic variable related to the respondents. Section B was gleans information on dependent variable Nosocomial Infections. Section C, garners information on the knowledge, attitude and health practices of hospital staff towards Nosocomial Infections in Abeokuta metropolis of Ogun State from the respondents. Reponses to each items was on a modified Likert type of scale ranging from (1: Strongly Agreed (SA), 2: Agreed (A), 3: Disagreed (D) to 4: Strongly Disagreed (SD)). The respondent indicates that all the items are clear. Items found not to meet 0.70, will be deleted and those deemed unclear were rephrased.

### 2a) Knowledge of Hospital Staff Questionnaire (KHSQ)

Knowledge of Hospital Staff Questionnaire (KHSQ) seeks information on knowledge independent variables as correlates of Nosocomial Infection from the respondents. It comprises of (2) sub knowledge variables with question items that was responded to by the hospital staff in Abeokuta metropolis of Ogun State. Reponses to each items was on a modified Likert type of scale ranging from (1: Strongly Agreed (SA), 2: Agreed (A), 3: Disagreed (D) to 4: Strongly Disagreed (SD)). The respondent indicates that all the items are clear. Items found not to meet 0.70, was deleted and those deemed unclear was rephrased.

### b) Attitude of Hospital Staff Questionnaire (AHSQ)

Attitude of Hospital Staff Questionnaire (AHSQ) seeks information on Attitude independent variables as correlates of Nosocomial Infection from the respondents. It comprises of (2) sub Attitude variables with question items that was responded to by the hospital staff in Abeokuta metropolis of Ogun State. Reponses to each items was on a modified Likert type of scale ranging from (1: Strongly Agreed (SA), 2: Agreed (A), 3: Disagreed (D) to 4: Strongly Disagreed (SD)). The respondent indicates that all the items are clear. Items found not to meet 0.70, was deleted and those deemed unclear will be rephrased.

### c.) Health Practices of Hospital Staff Questionnaire (HPSQ)

Health Practices of Hospital Staff Questionnaire (HPSQ) seeks information on Attitude independent variables as correlates of Nosocomial Infection from the respondents. It comprises of (2) sub health practices variables with question items that will be responded to

by the hospital staff in Abeokuta metropolis of Ogun State. Responses to each item was on a modified Likert type of scale ranging from (1: Strongly Agreed (SA), 2: Agreed (A), 3: Disagreed (D) to 4: Strongly Disagreed (SD)). The respondent indicates that all the items are clear. Items found not to meet 0.70, was deleted and those deemed unclear will be rephrased.

The validity of the instrument was ensured by giving a copy of the instrument to expert & scholars in the Department of Human Kinetics and Health Education in Tai Solarin University for their critics and suggestions. Their inputs were used to produce the final copy of the instrument for the study. The instrument was pilot tested on twenty(20) male & female hospital staff working in state hospital in Ijebu-ode. The respondents' responses were coded as following: 1: Strongly Agreed (SA), 2: Agreed (A), 3: Disagreed (D) to 4: Strongly Disagreed (SD)). Cronbach Alpha was used to determine the internal consistency of the instrument. The Nosocomial Infection Questionnaire (NIQ) yielded a reliability of  $r = 0.82$ , Knowledge of Hospital Staff Towards Nosocomial Infection Questionnaire (KHSQ) yielded a reliability of  $r = 0.782$ , Attitude of Hospital Staff Towards Nosocomial Infection Questionnaire (AHSQ) yielded a reliability of  $r = 0.813$  while Health Practice of Hospital Staff Towards Nosocomial Infection Questionnaire (HPHSQ) yielded a reliability of  $r = 0.844$ .

With the help of the research assistants, who helped in the administration of the instrument, the objective, content and implication of the study was fully explained to the respondents before responding to the questionnaire which was collected back on the spot. The hypotheses were tested using the inferential statistics of multiple regression at 0.05 level of significance.

## Results

**H0<sub>1</sub>:** On-the-job training will not significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

**Table 1: Regression Analysis of Hypothesis One**

| <b>R = 0.815</b><br><b>R<sup>2</sup> = 0.664</b><br><b>Multiple R<sup>2</sup> (adjusted) = 0.664</b><br><b>Standard error of estimate = 0.49685</b> |                    |      |             |          |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|-------------|----------|--------------------|
| Analysis of Variance                                                                                                                                |                    |      |             |          |                    |
| Model                                                                                                                                               | Sum of Square (SS) | Df   | Mean Square | F        | Sig                |
| Regression                                                                                                                                          | 527.042            | 1    | 527.042     | 2134.998 | 0.000 <sup>a</sup> |
| Residual                                                                                                                                            | 26.854             | 1081 | 0.247       |          |                    |
| Total                                                                                                                                               | 793.897            | 1082 |             |          |                    |

The table shows that independent variable (on-the-job training) have significant influence on knowledge of hospital staff towards nosocomial infections as this is shown by the value of  $R = 0.815$  and  $R^2$  (adjusted) = 0.664,  $P = 0.000$ . However, the result shows that on-the-job training will significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State ( $P < 0.05$ ).

**H0<sub>2</sub>:** Hospital awareness programmes will not significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

**Table 2: Regression Analysis of Hypothesis Two**

| <b>R = 0.874</b><br><b>R<sup>2</sup> = 0.763</b><br><b>Multiple R<sup>2</sup> (adjusted) = 0.763</b><br><b>Standard error of estimate = 0.41688</b> |                    |      |             |          |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|-------------|----------|--------------------|
| Analysis of Variance                                                                                                                                |                    |      |             |          |                    |
| Model                                                                                                                                               | Sum of Square (SS) | Df   | Mean Square | F        | Sig                |
| Regression                                                                                                                                          | 606.035            | 1    | 606.035     | 3487.264 | 0.000 <sup>a</sup> |
| Residual                                                                                                                                            | 187.862            | 1081 | 0.174       |          |                    |
| Total                                                                                                                                               | 793.897            | 1082 |             |          |                    |

The table shows that independent variable (hospital awareness programmes) have significant influence on knowledge of hospital staff towards nosocomial infections as this is shown by the value of  $R = 0.874$  and  $R^2(\text{adjusted}) = 0.763$ ,  $P = 0.000$ ). However, the result shows that hospital awareness programmes will significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State ( $P < 0.05$ ).

**H0<sub>3</sub>:** Over-confidence will not significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

**Table 3: Regression Analysis of Hypothesis Three**

| <b>R = 0.847</b><br><b>R<sup>2</sup> = 0.718</b><br><b>Multiple R<sup>2</sup> (adjusted) = 0.718</b><br><b>Standard error of estimate = 0.45501</b> |                    |      |             |          |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|-------------|----------|--------------------|
| Analysis of Variance                                                                                                                                |                    |      |             |          |                    |
| Model                                                                                                                                               | Sum of Square (SS) | Df   | Mean Square | F        | Sig                |
| Regression                                                                                                                                          | 570.092            | 1    | 570.092     | 2753.612 | 0.000 <sup>a</sup> |
| Residual                                                                                                                                            | 223.804            | 1081 | 0.207       |          |                    |
| Total                                                                                                                                               | 793.897            | 1082 |             |          |                    |

The table shows that independent variable (overconfidence) have significant influence on attitude of hospital staff towards nosocomial infections as this is shown by the value of  $R = 0.847$  and  $R^2(\text{adjusted}) = 0.718$ ,  $P = 0.000$ ). However, the result shows that overconfidence will significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State ( $P < 0.05$ ).

**H0<sub>4</sub>:** Fear of being infected will not significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

**Table 4: Regression Analysis of Hypothesis Four**

| <b>R = 0.955</b><br><b>R<sup>2</sup> = 0.911</b><br><b>Multiple R<sup>2</sup> (adjusted) = 0.911</b><br><b>Standard error of estimate = 0.25519</b> |                    |      |             |           |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|-------------|-----------|--------------------|
| Analysis of Variance                                                                                                                                |                    |      |             |           |                    |
| Model                                                                                                                                               | Sum of Square (SS) | Df   | Mean Square | F         | Sig                |
| Regression                                                                                                                                          | 723.501            | 1    | 723.501     | 11110.204 | 0.000 <sup>a</sup> |
| Residual                                                                                                                                            | 70.395             | 1081 | 0.065       |           |                    |
| Total                                                                                                                                               | 793.897            | 1082 |             |           |                    |

The table shows that independent variable (fear of being infected) have significant influence on attitude of hospital staff towards nosocomial infections as this is shown by the value of  $R = 0.955$  and  $R^2$  (adjusted) = 0.911,  $P = 0.000$ ). However, the result shows that fear of being infected will significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State ( $P < 0.05$ ).

**H0<sub>5</sub>:** Level of personal hygiene will not significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

**Table 5: Regression Analysis of Hypothesis Seven**

| <b>R = 0.827</b><br><b>R<sup>2</sup> = 0.684</b><br><b>Multiple R<sup>2</sup> (adjusted) = 0.684</b><br><b>Standard error of estimate = 0.48188</b> |                    |      |             |          |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|-------------|----------|--------------------|
| Analysis of Variance                                                                                                                                |                    |      |             |          |                    |
| Model                                                                                                                                               | Sum of Square (SS) | Df   | Mean Square | F        | Sig                |
| Regression                                                                                                                                          | 542.883            | 1    | 542.883     | 2337.941 | 0.000 <sup>a</sup> |
| Residual                                                                                                                                            | 251.014            | 1081 | 0.232       |          |                    |
| Total                                                                                                                                               | 793.897            | 1082 |             |          |                    |

The table shows that independent variable (level of personal hygiene) have significant influence on practice of hospital staff towards nosocomial infections as this is shown by the value of  $R = 0.827$  and  $R^2$  (adjusted) = 0.684,  $P = 0.000$ ). However, the result shows that level of personal hygiene will significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State ( $P < 0.05$ ).

**H0<sub>6</sub>:** Good hospital management will not significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

**Table 6: Regression Analysis of Hypothesis Eight**

| <b>R = 0.896</b><br><b>R<sup>2</sup> = 0.803</b><br><b>Multiple R2 (adjusted) = 0.803</b><br><b>Standard error of estimate = 0.38042</b> |                    |      |             |          |                    |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|-------------|----------|--------------------|
| Analysis of Variance                                                                                                                     |                    |      |             |          |                    |
| Model                                                                                                                                    | Sum of Square (SS) | Df   | Mean Square | F        | Sig                |
| Regression                                                                                                                               | 637.458            | 1    | 637.458     | 4404.866 | 0.000 <sup>a</sup> |
| Residual                                                                                                                                 | 156.439            | 1081 | 0.145       |          |                    |
| Total                                                                                                                                    | 793.897            | 1082 |             |          |                    |

The table shows that independent variable (good hospital management) have significant influence on practice of hospital staff towards nosocomial infections as this is shown by the value of  $R = 0.896$  and  $R^2$  (adjusted) = 0.803,  $P = 0.000$ ). However, the result shows that good hospital management will significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State ( $P < 0.05$ ).

### Discussion of Findings

**Hypothesis One:** From the regression results, it was observed that on-the-job training will significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State. This result is in agreement with that of Itam and Adindu (2012) whose study revealed that clinical competencies acquired from tertiary institutions alone are no longer enough; every hospital staff, requires from medical facilities of appointed to, additional knowledge, skills and attitude to creative and logical thinking, flexibility, and teamwork when dealing with nosocomial infections. Most resident doctors and nurses are mostly too busy to explain safety procedures to new staff, so these new staff are required to learn on-the-job through close observation of how safety practices in the hospitals are being carried out.

**Hypothesis Two:** Results of the regression analysis revealed that hospital awareness programmes will significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State. This conforms with the works of Edet, Edet & Samson (2010) who revealed that hospital staff in Calabar, Cross-River State attend seminars, workshops which create awareness on hospital contracted-infection control but the practice is still questionable among hospital staff in the study area. Additionally, the outbreak of Ebola virus has given more impetus to hospitals and other medical facilities to increase their sensitization and awareness of nosocomial infection control among hospital staff in Nigeria and other nations across the globe.

**Hypothesis Three:** Results of data analysis showed that overconfidence will significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State. Taneje, Bagheri-Nejad, Combescure, Graafmans, Attar, Donaldson & Pittet (2009) agrees with the findings and according to their study, it was revealed that overconfidence may come in various forms, it's often the cause of hospital staff arrogantly brushing off safety initiatives. Every time overconfidence fuels hospital staffs' decision to not take even minor safety precautions in day to day hospital activities, they are actively choosing the option associated with the greater risk of being infected with nosocomial



infections. It's important to have more than just safety procedures and standards in place at hospitals. If those work well, they can still encourage hospital staff to believe they are immune to risks of being infected with nosocomial infections. By making sure the facts about the risks, hazards, and dangers in hospitals environment in the forefront of the staffs' minds, they can keep their confidence in check and resist the temptation to ignore safety protocols and reduce the incidence of nosocomial infections.

**Hypothesis Four:** The results of data analysis revealed that fear of being infected will significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State. This conforms with Ademola (2012) who revealed that the extent of the spread of nosocomial infections in hospitals in Nigeria has meant that many people are affected by either a nosocomial death or illness. Hospital staff themselves are mostly scared to confront various infections at their workplace but also are affected due to their sick families, friends, neighbours and colleagues. When they finish work at the end of the day they are faced with those that are terribly ill at home and it becomes hard for them to disengage themselves from their profession while they are at home.

**Hypothesis five:** Furthermore, the study revealed that level of personal hygiene will significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State. Polin, Denson and Brady (2013) support the similar findings when they opined that nosocomial infection causing pathogens that have been observed to be found on hospital staffs' hands after such patient contact range from *Klebsiella* spp., *Staphylococcus aureus*, *Clostridium difficile*, MRSA and gram-negative bacteria as a result of poor practice of personal hygiene. However, direct patient contact is not the only way hospital staffs hands can be contaminated. Hospital staffs can acquire bacteria on their hands by touching contaminated surfaces in the patient environment and simply by touching a contaminated chart at the nurses' station, according to the literature. Washing hands before and after patient contact seems like a simple solution to prevent the spread of nosocomial infection among hospital staff. Most hospitals have personal and hand hygiene policies in place that guide their employees to do just that. But it is not as simple as it seems.

**Hypothesis six:** Regression results revealed that good hospital management will significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State. This result conforms with that of Haley (2016) who revealed that Administrators of big hospitals tend to treat very sick staff who have lower immunity to infections – for example, cancer-diagnosed staff and staff with kidney infection. These hospitals carry out complex procedures that put staffs at greater risk of acquiring an infection in hospital. At the same time, there is a rationale for having big hospitals – for example, to bring together specialist expertise and sophisticated equipment that often requires expert operators. The job of infection control by the hospital management is to manage the risk of hospital-acquired infection in an environment where very sick staff are receiving complex and invasive treatments to reduce further spread of nosocomial infections.

## Conclusion

The study identified a number of factors that influence the knowledge, attitude and health practices of hospital staff towards nosocomial infections in Abeokuta metropolis of Ogun State. Base on the empirical findings, the study concluded that:

1. On-the-job training will significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

2. Hospital awareness programmes will significantly influence knowledge of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.
3. Over-confidence will significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.
4. Fear of being infected will significantly influence attitude of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.
5. Level of personal hygiene will significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.
6. Good hospital management will significantly influence practice of hospital staff towards nosocomial infections in Abeokuta Metropolis of Ogun State.

### Recommendations

Base on the conclusion, the following recommendation were made:

- Simple and effective control programme together with computer-based epidemiological surveillance carried out as a global project with considerable inputs from developing countries for monitoring will enable the development of nosocomial infections to be halted if not eliminated.
- In addition, it is necessary to review the current infection control practices in all hospitals particularly in developing countries including Nigeria so as to incorporate molecular techniques which have been proven to be effective in keeping the spread of nosocomial infections under check.
- The training and retraining of health care givers on principles of infection control is strongly recommended.
- The principles of infection control should be incorporated into student nurses, medical students, and other paramedical curriculum as well as employment of adequately competent health workers to avoid over labour which sometimes cause workers to be inefficient resulting in disease outbreaks.
- Hand washing and other standard infection control practices should be adhered to so that nosocomial infections can be controlled effectively.
- Finally, Health educators in the hospital are to organize health awareness programmes to bring about positive changes in the knowledge, attitude, health practices of hospital staff towards nosocomial infections

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