

A Study on the Effectiveness of Occupational Health and Safety Measures in Amala Medical College Hospital, Thrissur

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ABSTRACT

Human Resource Management is concerned with people's dominion in organization. So competent employees have to be appointed at right place at right time. The success of every organization depends on how well the human resource is managed and organized. The hospital environment is the most hazardous work environment, because of the increased chance of getting infected to any kind of diseases. So, both the patients and the employees have to take care of their safety on hospital environment. Cleaning services include a broad range of activities and are performed in different work environments, such as homes, offices, industries, schools, shops, hospitals and aircrafts. The risk that cleaners may be exposed to depend on the tasks they perform but also the premises they work in. The method had unacceptably poor reliability ranging from poor to moderate. One very important function of human resource management is to maintain and preserve worker's physical abilities and mental attitudes. The importance of occupational safety was realized because every year millions of accidents occur in the working environment which results in either death or in temporary or permanent disablement of the employees and involve a good amount of cost such as resulting from wasted man hours, machine hours etc.

1. Introduction

Human Resource Management is concerned with people's dominion in organization. So competent employees have to be appointed at right place at right time. The success of every organization depends on how well the human resource is managed and organized. The hospital environment is the most hazardous work environment, because of the increased chance of getting infected to any kind of diseases. So both the patient and the employees have to take care of their safety on hospital environment. Health and safety of the work environment also have its importance. In the rapid economic growth, it becomes crucial that safety and the health at the workplace should be given due importance. Health is a general state of physical, mental and emotional well-being. It will help to improve productivity, quality of work, and reduced labor turnover. The problems of occupational health and safety has been given due importance recently.

In order to ensure a self-enforcing environment, where assurance of occupational health and safety is the norm rather than afterthought, a positive strong infrastructure has to be developed. This necessitates a reorientation not only in the minds of the employees and the managers, but also in the attitudes of the public. An integrated approach is to be adopted to have a healthy and safety industrial environment. The day-to-day changes in the economy as well as technology have a great impact on the occupational health and safety of the employees.

2. Research Problem

Health and safety, are the most important aspects of every business environment. Its not matter what type of business is; there is always the possibility to happen accidents and damage to someone's life. So it's very important to keep the safety and

health of the employees. All work exposes people to hazards, like dangerous machinery, toxic substances, electricity, fire, or even psychological hazards like stress and tension. Same way hospitals are the most hazardous place to work. Because the chances of spreading diseases as well as infection is high in the case of hospital working environment.

So it's very important to update the safety measures of hospital environment. Because the hazards of hospital environment can cause damages to not only the employees but also the patients too. The problem mainly focuses on the effectiveness of occupational safety measures provided by the organization.

3. Objectives of the study

- To study the effectiveness of health and safety measures adopted by the management of Amala Medical College hospital.

4. Methods and Techniques

4.1 Research Design

Descriptive design is taken for conducting this study. The study is completely based on the description of the factors that helps to measure the effectiveness of the safety measures available.

4.2 Sources of Data Collection

The data has been collected from both primary and secondary sources.

Primary Sources

Primary data are collected through questionnaires and formal interview with the medical and non medical staffs of the hospital.

Secondary Data

Secondary data on the other hand includes the data collected from magazines, journals, websites other publications.

4.3 Sampling size

The sample size taken for the study is hundred employees of Amala Medical College Hospital, Thrissur. The employees include fifty medical staffs and fifty non-medical staffs.

4.4 Data Analysis

For analyzing the data percentages and Chi square was adopted.

4.5 Limitations of the study

- Being a hospital the busy schedule also become a barrier.
- Confidential data were kept aside.
- Cannot meet every employee because of their busy schedule.

5. Data Analysis and Interpretation

5.1 demographic profile of the respondents

Table 1 Demographic Profile of the Respondents

| Attributes | Number of respondents | Percentage of respondents |
|--|-----------------------|---------------------------|
| Age of the Respondents | | |
| Less than 30 | 36 | 36 |
| 30-40 | 35 | 35 |
| 40-50 | 17 | 17 |
| 50-60 | 12 | 12 |
| Total | 100 | 100 |
| Gender of the Respondents | | |
| Male | 30 | 30 |
| Female | 70 | 70 |
| Total | 100 | 100 |
| Experience details of the Respondents | | |
| Less than 1 year | 20 | 20 |
| 1-3 years | 38 | 38 |
| 3-5 years | 30 | 30 |

| | | |
|-------------------------------|-----|-----|
| 5-10 years | 9 | 9 |
| More than 10 years | 3 | 3 |
| Total | 100 | 100 |
| Working hours in a day | | |
| 8 hours in a day | 54 | 54 |
| Less than 8 hours | 8 | 8 |
| More than 8 hours | 38 | 38 |
| Total | 100 | 100 |

Source: Primary data

Interpretation

Age: From the above table it is found that majority of the respondents fall under the category of 20-30 age group i.e. 36 percentage of the employees, 35 percentage of employees fall under the category of 30-40 age group, and only 12 percentage of employees fall under the category of 50-60.

Gender: It is found that, majority of the employees were female i.e. 70 percentage of employees and 30 percentage of employees fall under the category of male.

Experience :Here, majority of the employees have the experience between 1 to 3 years (38 percentage). Only 3 percentage have more than three years experience.

Working hours in a day depends upon the nature of the work. Medical staffs have to work more than eight hours and it depends upon the situations. Majority i.e. 54 percentage have to work 8 hours daily. Only 8 percentage have to work less than 8 hours in a day.

5.2 Association between experience of respondents and realizing the importance of occupational health & safety

Here an attempt is made to study whether there is any relation between experience of the Respondents and how well the respondents realize the importance occupational health and safety.

H₀: Attribute Experience and Realizing the importance of occupational health and safety are independent.

H₁: Attribute Experience and Realizing the importance of occupational health and safety are not independent.

Table 2. Case Processing Summary

| | Cases | | | | | |
|---|-------|---------|---------|---------|-------|---------|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Experience & Realizing The Importance Of Occupational Health & Safety | 100 | 98.0% | 2 | 2.0% | 102 | 100.0% |

Table 3. Experience Of Respondents And Realizing The Importance Of Occupational Health And Safety- Crosstabulation

| Experience | Realizing The Importance Of Occupational Health And Safety | | | | Total |
|------------------|--|--------------------|--------------------------------------|--|-------|
| | Employees' Welfare | Employer's Welfare | Both Employees and Employers Welfare | Employees, Employers Welfare and Third party Welfare | |
| Less than 1 year | 1 | 5 | 12 | 1 | 19 |
| 1-3 years | 2 | 6 | 20 | 10 | 38 |
| 3-5 years | 2 | 6 | 19 | 4 | 31 |
| 5-10 years | 0 | 2 | 6 | 1 | 9 |
| Above 10 years | 0 | 2 | 1 | 0 | 3 |
| Total | 5 | 21 | 58 | 16 | 100 |

Source : Primary data

Table 4. Chi-Square Tests

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square | 9.973 ^a | 12 | .618 |
| Likelihood Ratio | 10.127 | 12 | .605 |
| Linear-by-Linear Association | .085 | 1 | .770 |
| N of Valid Cases | 100 | | |

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .15.

It is clear from the above study that the p value obtained is greater than the significance value. (0.05). Hence, we accept the Null hypothesis that the two attributes are independent. It proved that Experience is not the indicator for realizing the importance of Occupational Health and safety.

5.3 Association Between Experience Of Respondents & Various Safety & Protective Measures Available

Is there any association between Experience of the employees and the Various safety measures available in the

hospital is analysed below. Chi square test is adopted for measuring the association.

Ho: Attribute Experience Of Respondents & Various Safety Protective Measures Available Are Independent

H₁: Attribute Experience Of Respondents & Various Safety Protective Measures Available are not independent.

Table 5. Case Processing Summary

| | Cases | | | | | |
|---|-------|---------|---------|---------|-------|---------|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Experience & Safety Protective Measures Available | 100 | 98.0% | 2 | 2.0% | 102 | 100.0% |

Table 6. Experience Of Respondents & Various Safety & Protective Measures Available –Crosstabulation

| Experience | Protective Measures Available | | | | Total |
|------------------|-------------------------------|---------------------------------------|-----------------|----------------------------------|-------|
| | Using Protective Clothing | Regular Monitoring on Health & Safety | Safety Training | Proper disposal of Medical Waste | |
| Less than 1 year | 7 | 4 | 5 | 3 | 19 |
| 1-3 years | 8 | 5 | 13 | 12 | 38 |
| 3-5 years | 7 | 5 | 18 | 1 | 31 |
| 5-10 years | 3 | 0 | 3 | 3 | 9 |
| Above 10 years | 0 | 2 | 1 | 0 | 3 |
| Total | 25 | 16 | 40 | 19 | 100 |

Source : Primary data

Table 7. Chi-Square Tests

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 21.865 ^a | 12 | .039 |
| Likelihood Ratio | 23.623 | 12 | .023 |
| Linear-by-Linear Association | .099 | 1 | .753 |
| N of Valid Cases | 100 | | |

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .48.

The test results of the above table shows that the p value obtained is less than the significance level (.05). Hence, the Null hypothesis is rejected which proves that the experience of the respondents have an impact on the various safety measures available.

5.4 Association between experience of respondents and satisfaction towards occupational health and safety

The previous studies shows that there is an association between work experience of respondents and the satisfaction towards work. Hence, an attempt is made to know whether there is any association between work experience of respondents and the satisfaction towards occupational health and safety.

Ho: Attribute Experience Of Respondents And Satisfaction Towards Occupational Health And Safety are independent.

H₁: Attribute Experience Of Respondents And Satisfaction Towards Occupational Health And Safety are not independent.

Table 8. Case Processing Summary

| | Cases | | | | | |
|--|-------|---------|---------|---------|-------|---------|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Experience And Satisfaction Towards Occupational Health And Safety | 100 | 98.0% | 2 | 2.0% | 102 | 100.0% |

Table 9. Experience Of The Respondents And Satisfaction On Occupational Health & Safety Crosstabulation

| Experience | Satisfaction On Occupational Health & Safety | | | | | Total |
|------------------|--|--------------|------------|-----------|------------------|-------|
| | Highly Dissatisfied | Dissatisfied | No Opinion | Satisfied | Highly Satisfied | |
| Less than 1 year | 0 | 0 | 2 | 16 | 1 | 19 |
| 1-3 years | 3 | 1 | 4 | 26 | 4 | 38 |
| 3-5 years | 0 | 0 | 2 | 28 | 1 | 31 |
| 5-10 years | 0 | 2 | 1 | 6 | 0 | 9 |
| Above 10 years | 0 | 0 | 0 | 3 | 0 | 3 |
| Total | 3 | 3 | 9 | 79 | 6 | 100 |

Source : Primary Data

Table 10. Chi-Square Tests

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 22.152 ^a | 16 | .138 |
| Likelihood Ratio | 18.963 | 16 | .271 |
| Linear-by-Linear Association | .177 | 1 | .674 |
| N of Valid Cases | 100 | | |

a. 21 cells (84.0%) have

b. Expected count less than 5. The minimum expected count is .09.

From the above test it is clear that the p value obtained is greater than the significance value (0.05). Hence, the Null hypothesis is accepted which proves there is no association between experience of the respondents and satisfaction on occupational health and safety.

5.5 Association Between Experience Of The Respondents And Satisfaction On Current Safety Measures In The Hospital.

It has been noticed that highly experienced persons are better aware of the current working condition in an organization. Like wise in hospitals too, those who are working

for years will be well aware of the safety measures to be taken in emergencies. Hence, an attempt is made to analyse whether there is any relation between Experience Of The Respondents And Current Safety Measures In The Hospital.

H₀: Association Between Experience Of The Respondents And Satisfaction On Current Safety Measures In The Hospital are Independent.

H₁: Association Between Experience Of The Respondents And Satisfaction On Current Safety Measures In The Hospital are not Independent.

Table 11. Case Processing Summary

| | Cases | | | | | |
|--|-------|---------|---------|---------|-------|---------|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Experience And Satisfaction On Current Safety Measures In The Hospital | 100 | 98.0% | 2 | 2.0% | 102 | 100.0% |

Table 12. Experience Of The Respondents And Satisfaction On Current Safety Measures In The Hospital.

| Experience | Satisfaction On Current Safety Measures In The Hospital. | | | | | Total |
|------------------|--|--------------|------------|-----------|------------------|-------|
| | Highly Dissatisfied | Dissatisfied | No Opinion | Satisfied | Highly Satisfied | |
| Less than 1 year | 2 | 0 | 1 | 16 | 0 | 19 |
| 1-3 years | 1 | 1 | 6 | 29 | 1 | 38 |
| 3-5 years | 1 | 0 | 3 | 22 | 5 | 31 |

| | | | | | | |
|----------------|---|---|----|----|---|-----|
| 5-10 years | 0 | 0 | 0 | 9 | 0 | 9 |
| Above 10 years | 0 | 1 | 0 | 1 | 1 | 3 |
| Total | 4 | 2 | 10 | 77 | 7 | 100 |

Source : primary data

Table 13. Chi-Square Tests

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 32.910 ^a | 16 | .008 |
| Likelihood Ratio | 24.078 | 16 | .088 |
| Linear-by-Linear Association | 1.912 | 1 | .167 |
| N of Valid Cases | 100 | | |

a. 21 cells (84.0%) have expected count less than 5. The minimum expected count

From the above table it can be inferred that the p value obtained is less than the table value. Hence, the Null hypothesis is rejected. It is proved that there is an association between Experience of the respondents and the current safety measures available.

5.6 Association between experience of the respondents and satisfaction on availability of first aids in the hospital.

An attempt is made here to test the association between Experience of the respondents and satisfaction on the availability of first aids in the hospital.

Ho: Experience of the respondents and satisfaction on the availability of first aids in the hospital are independent.

H₁: Experience of the respondents and satisfaction on the availability of first aids in the hospital are not independent.

Table 14. Case Processing Summary

| | Cases | | | | | |
|---|-------|---------|---------|---------|-------|---------|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Experience And Satisfaction On Availability Of First Aids In The Hospital | 100 | 98.0% | 2 | 2.0% | 102 | 100.0% |

Table 15. Experience Of The Respondents And Satisfaction On Availability Of First Aids In The Hospital.Crosstabulation

| Experience | Satisfaction On Availability Of First Aids In The Hospital | | | | | Total |
|------------------|--|--------------|------------|-----------|------------------|-------|
| | Highly Dissatisfied | Dissatisfied | No Opinion | Satisfied | Highly Satisfied | |
| Less than 1 year | 1 | 0 | 0 | 17 | 1 | 19 |
| 1-3 years | 0 | 0 | 6 | 31 | 1 | 38 |
| 3-5 years | 2 | 2 | 4 | 20 | 3 | 31 |
| 5-10 years | 1 | 0 | 2 | 5 | 1 | 9 |
| Above 10 years | 0 | 0 | 0 | 3 | 0 | 3 |
| Total | 4 | 2 | 12 | 76 | 6 | 100 |

Source : Primary Data

Table 16. Chi-Square Tests

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 15.916 ^a | 16 | .459 |
| Likelihood Ratio | 19.640 | 16 | .237 |
| Linear-by-Linear Association | 1.121 | 1 | .290 |
| N of Valid Cases | 100 | | |

a. 21 cells (84.0%) have expected count less than 5. The minimum expected count is .06.

It can be inferred from the above table that the p value obtained is higher than the significance value (0.05). Hence, the Null hypothesis is accepted. There is no association between experience of the respondents and the availability of the first aids.

5.7 Association between availability of safety equipment & rate of diseases infected

Association between Availability of safety equipment and the rate of diseases infected is tested with Chi Square.

Ho: Availability Of Safety Equipment & Rate Of Diseases Infected are independent.

H₁: Availability Of Safety Equipment & Rate Of Diseases Infected are not independent.

Table 17. Case Processing Summary

| | Cases | | | | | |
|--|-------|---------|---------|---------|-------|---------|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Availability Of Safety Equipment & Rate Of Diseases Infected | 100 | 98.0% | 2 | 2.0% | 102 | 100.0% |

Table 18. Availability Of Safety Equipment & Rate Of Diseases Infected–Crosstabulation

| Availability Of Safety Equipment | Rate Of Diseases Infected | | | Total |
|-------------------------------------|---------------------------|--------------------|---------------------|-------|
| | Yes, many times | Sometimes affected | Not at all infected | |
| No, Not for Everyone | 11 | 9 | 8 | 28 |
| Sometimes | 3 | 2 | 2 | 7 |
| Yes, have safety equipment for each | 35 | 16 | 14 | 65 |
| Total | 49 | 26 | 24 | 100 |

Table 19. Chi-Square Tests

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square | 2.102 ^a | 4 | .717 |
| Likelihood Ratio | 2.123 | 4 | .713 |
| Linear-by-Linear Association | 1.391 | 1 | .238 |
| N of Valid Cases | 100 | | |

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.45.

From the above study it is clear that the p value obtained is greater than the level of significance (0.05). Hence, the Null hypothesis is accepted. There is no association between the availability of safety equipment and rate of diseases affected.

The results of the study gives a clear cut idea about the employee feedback on the available safety measures and also the effectiveness of the available safety and health measurements provided by the hospital.

6. Findings & Suggestions

- Demographic Profile of the respondents: Majority of the respondents fall under the category of 20-30 age group i.e. 36 percentage of the employees. Majority of the employees were female i.e. 70 percentage of employees. Majority of the employees have the experience between 1 to 3 years (38 percentage). Majority of the respondents i.e. 54 percentage have to work 8 hours daily.
- Experience is not the indicator for realizing the importance of Occupational Health and safety as the p value obtained is greater than the significance value.
- Experience of the respondents have an impact on the various safety measures available.
- There is no association between experience of the respondents and satisfaction on occupational health and safety.
- There is an association between Experience of the respondents and the current safety measures available.
- There is no association between experience of the respondents and the availability of the first aids.

- There is no association between the availability of safety equipment and rate of diseases affected.

7. Suggestions

- The accidents recorded are very few for the employees, so the current safety measures have to be followed in a very effective manner.
- Environmental matters to be take in care at the time of disposal of hospital waste.
- The equipment have to be used with all precautions.
- The proper training should have to give every employees to make them aware about the seriousness of the hospital environment and need of the safety precautions.
- The commitment shown by the management towards health and safety measures should be kept at the same level or at higher level.
- The health and safety policies should have to be updated properly for the effectiveness of the health and safety system.

8. Conclusion

The study concludes that the present health and safety measures available in the hospital are effective. The majority of the employees are satisfied with the health and safety measures in the hospital. The proper management of the medical equipment is very important for the safety of employees as well as the patients. The service of the hospital is purely related with the work environment of the hospital, so for providing the better service quality the employees should be provided with good and healthy working environment.

References

1. Asian Labour Update. (2001). *India – Health and Safety at Work*, Issue 39, April-June 2001. Retrieved on July 16, 2006 from http://www.amrc.org.hk/alu_article/occupational_health_and_safety/india_health_and_safety_at_work.
2. Cassito et al. (2003). *Protecting Workers Health Series: Raising Awareness to Psychological Harassment at Work*. Finland: Helsinki.
3. Hughes and Ferrett. (2003). *Introduction to Health and Safety at Work*, United Kingdom: Elsevier Butterworth and Heinemann.
4. Kaila, H.L. et al (2001). *Managing Occupational Health in Service Industries*. Mumbai: Himalaya Publishing House.
5. Wilson, Alex. (2011). *Focus on Health and Safety Report*, 2011. Retrieved on February 14,
6. 2012 from <http://www.eurofound.europa.eu/ewco/2011/04/UK1104029I.htm>