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## Maintenance of facilities for women's safety in hostels

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### ABSTRACT

*This study is to re-emphasize the importance of maintenance and safety in working women hostels in Hyderabad, India. This study has been taken from a security audit that has been conducted by Cyberabad police in women's hostels and paying guest (PG) accommodations around Madhapur, Gachibowli, Raidurgam areas, and has found that 197 hostels which were surveyed do not have main gates, watchman, firefighting equipment & visitors register. To enhance the safety features in women's hostels, Cyberabad Police Commissioner has issued certain guidelines to all the hostels earlier asking them to comply with 10 Safety features they must follow for safety and security of the inmates. They are called 10 Security Commandments. Those included were regarding the compound wall height, CCTVs at entry & Exit points, gates, first aid kit, 24X7 security guards, maintenance of ID proofs of hostel employees and inmates, fire extinguishers, visitors register, complaint box, individual lockers for women safety in hostels. The current study focuses on "MAINTENANCE" of facilities in women hostels. Non-availability or lack of maintenance of these facilities in hostels may become a cause of security lapse. Therefore to "identify and analyze the level of maintenance of items" and "security measures adopted by the hostel management", were considered to be essential. The aim is limited to improving the perception of safety and security through Maintenance Management in Women hostels. The maintenance of machine and maintenance of equipment is the process of keeping it in good condition by regularly checking it and repairing it when necessary and maintaining records in the hostel. Maintenance of mobile-based women safety application is to promote personal safety which comes with feature like Calling and sending the messages to hostel management.*

### Keywords:

### 1. INTRODUCTION

**Safety** is a state of being "safe"; it is the condition of being protected from harm. A **hostel** has always been regarded as smaller, slightly cheaper alternative to a hotel, and a hostel is commonly used by students and working men or women. Observation from the pilot survey showed that mere availability and installation of essential items did not ensure safety or did not enhance the perception of safety among inmates. The importance of maintenance of facilities mentioned in the checklist, in hostels to enhance or ensure safety.

Table 1: Checklist given by police department <sup>1</sup>

S. No	ITEM	SPECIFICATION	AVAILABLE	NOT AVAILABLE
1	Access Control	Gate (main and wicket gate )		
2	Compound wall and its height	5 feet		
3	Watch man	Round the clock (24X7)		
4	Visitors Register	Prescribed format		
5	CCTV	At entry and exit		
6	Fire Extinguishers	One 6kgs fire extinguisher per 200 square feet		
7	Notice board	-----		
8	First-Aid kits	-----		
9	Suggestions/complaints box	At Reception counter		
10	ID proofs of staff & workers	Aadhaar/Voter ID/ etc. with photo		

11	Individual locker for inmates	-----		
12	Verification of IDs before renting accommodation	-----		

Source: Data Shared by Police Department

**1.2 Problem formulation:** Police department considers Close circuit TV (CCTV), Fire Equipment, Security Guard, First-Aid Box, maintenance report as basic facilities. Non-availability or lack of maintenance of these basic facilities in hostels may become a cause of security lapse.

**1.3 Objectives of the study:** To identify the facilities available within the hostel and to check monitoring and maintenance of facility available.

**1.4 Scope of the study:** The scope is limited to improving the perception of safety and security through Maintenance Management in Women hostels.

**1.5 Limitations of the study:** This study has limitation of generalization, limitation of time and cost, and limitation of personal bias of respondent.

**2.0 LITERATURE REVIEW**

=>According to Times of India, in the article titled, “Women’s hostels lack gates, watchmen, but rely on CCTV”, an audit has been conducted in women’s hostels and paying guest (PG) accommodations in Hyderabad, and have found that 197 hostels which were surveyed do not have main gates, watchman, firefighting equipment & visitors register<sup>2</sup>.

=>According to Telugu India in the article titled, “Enhance safety in women’s hostels: Cyberabad CP”, March 4<sup>th</sup> 2017, to enhance the safety features in women’s hostels, Cyberabad Police Commissioner has issued certain guidelines with 10 security features to all the hostels<sup>3</sup>.

=>According to Kritika Sharma in the article titled, “Police security audit paints a frightening picture of women” hostels in Delhi”, published in mail online India, on 8 Jan 2013, a security audit was carried out by Delhi police in more than 200 working women and student hostels. Based on the audit, police compiled a list of suggestions to the hostel management on women security<sup>4</sup>.

These were the observations made and suggestions given by the police department:

**OBSERVATIONS MADE DURING THE AUDIT**

- CCTV cameras were not installed on the premises of the hostels
- Security guards were not deployed in most of the private PG accommodations. No checking was conducted at the main entrance of the buildings
- In some women's hostels, visitors were allowed to meet the boarders on the premises without a pass
- No identity cards were issued to regular employees in government hostels
- Identities of the guards, sweepers and maids working in both private and government hostels were not verified
- Boundary walls surrounding the PG accommodations were low and did not have fencing to keep intruders from jumping in
- Lack of proper light on the streets and in and around the paying guest building
- Lack of transport facility to ferry girls/women to and from the nearest metro station and bus stand
- No assistance for girls at odd hours, owing to which they are forced to go out on their own
- No intercom facility between the guard room and the administrative office

Fig1: Observations made by police department

**SUGGESTIONS GIVEN**

- All PG accommodations & hostels should install CCTV cameras
- At least one security guard be deployed at the entrance and one at the rear for big hostels
- Installation of bigger lamps around building
- Owners should keep record of PGs such as permanent address, place of work, mobile numbers
- Visitors allowed to meet boarders only after verification
- High boundary walls should be erected
- Hostels should hire a few taxis and registered drivers to ferry girls from the nearest metro station/bus stop during odd hours

Fig2: Suggestions given by police department

**3. RESEARCH METHODS AND DESIGN**

**3.1 Research design:** A research design is the arrangement of conditions for collection and analysis of data in a manner that effectively address the research problem. Research design constitutes the blueprint for the collection, measurement and analysis of data.<sup>5</sup>

**3.2 Research tool:** Questionnaire method for data collection was used.

**3.3 Research method**

**3.3.1 Sample design:** Non-Probability Sampling was employed because all sample members do not have equal chance of being picked. Convenience Sampling was employed, as it is a type of non-probability sampling method where the samples are selected based on the availability and judgment of the researcher.

**3.4 Sample size:** Total Population<sup>6</sup> of working women hostels in Hyderabad = 2042.

A sample of twenty hostels was selected on the basis of researcher’s judgment. Hostels were visited in ECIL, Vidyanagar, Ameerpet, Madhapur, Ayyappa society. Four questionnaires were distributed in each of the hostels, totaling to eighty questionnaires.

Using sample size calculator<sup>7</sup>, sample size of respondents = 80

**3.5 Source of data:** The primary data was collected directly from the respondents with the help of a structured Questionnaire.

**3.6 Tools and Techniques:** Likert scale and Correlation was used for the data analysis because Likert scale is used to analyze the extent to which the respondent agrees with a particular question or statement. Whereas, correlation tells us the degree of relationship existing between two variables which lies between +1 and -1

Questionnaire:

Personal details:

- a. Name:
- b. Age:
- c. Contact number:
- d. Email

Hostel details:

- i. Name of the hostel:
- ii. Address of the hostel:
- iii. Contact number:

1Q. How is the accommodation in your opinion?

- (a) Worse (b) Not Good (c) Good (d) very Good (e) Excellent

2Q. What is the degree of importance given to safety measures to be maintained in hostel?

- (a)Not at all important (b) Somewhat important (c) extremely important

3Q. Which among the following facilities are available? Please (√) Tick mark

S.No	Facilities	Tick mark
1	Security guard	
2	Cctv cameras	
3	Incident report	
4	Fire equipment	
5	First aid box	
6	Locks and bolts	
7	Maintenance report	
8	Student complaint register	
9	Biometric system	
10	Visitors register	

4Q. Are the facilities mentioned below operating properly? Rank with the following Description

S.No	Facilities	Never	Rarely	Sometimes	Frequently	Always
1	Security guard					
2	Cctv cameras					
3	Incident record					
4	Fire equipment					
5	First-aid box					
6	Locks and bolts					
7	Maintenance report					

5Q. Is safe and pure drinking water available?

- (a)Never (b) Rarely (c) Sometimes (d) Frequently (e) Always

6Q. Are toilets, washrooms clean and in working order?

- (a) Never (b)Rarely (c) Sometimes (d) Frequently (e) Always

7Q. Is your hostel campus ragging free?

- (a)Not sure (b) No (c) Yes

8Q. Are they allowing unauthorized person to enter into the hostel premises?

(a)Never (b) Rarely (c) Sometimes (d) Frequently (e) Always

9Q. Which facility in your opinion is essential for your safety (Rank 1-5, rank should not be repeated)?

S. No	Facilities	Rank
1	Security Guard	
2	Cctv cameras	
3	Fire equipment	
4	First aid box	
5	Biometric system	

10Q. Tick the appropriate box for the following sentences?

S.No	Facilities	Never	Rarely	Sometimes	Frequently	Always
1	Is Security guard available round the clock?					
2	Cctv cameras with at least 15 days of recording facility?					
2	Are you using any mobile based application system for safety?					
3	Are the feedbacks used as inputs for improvement?					

11Q. How do you communicate with inmates in an emergency?

(a) Mobile safety application (b) Email (c) In person (d) Calling (e) Text Messages

12Q. Have there been an incidence of safety lapse?

(a) Never (b) Rarely (c) Sometimes (d) Frequently (e) Always

13Q. Has appropriate corrective action been taken where necessary?

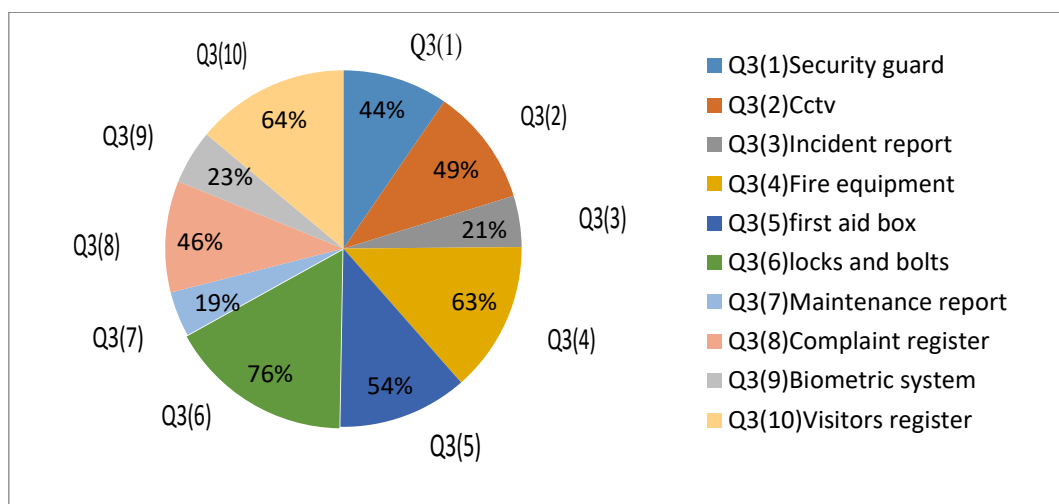
(a) Never (b) Rarely (c) Sometimes (d) Frequently (e) Always

14Q. How safe do you feel in a hostel?

(a)Very low (b) Low (c) Moderate (d) High (e) Very high

#### 4. DATA ANALYSIS AND INTERPRETATION

##### 4.1 Availability of facilities in hostels:



**Fig3: Percentage of available facilities in hostels**

**Inference:** From the above chart it is observed that Maintenance reports are mostly not available. The management is not maintaining any Incident report in most of the cases.

**Conclusion:** Maintenance of existing safety equipment is not being perceived as important for security of inmates. Incident reports give an input for proactive measures that can be taken to prevent any future incidents. Not keeping a record of previous incidents is a bad practice.

**4.2 Likert scale:** Likert scale was used for the following analysis .

4.2.1 Measuring the respondent’s favorableness regarding operating or maintaining facilities in hostels:

**Table 2: Measuring the respondent’s favorableness**

4(1). Security guard	<b>322</b>	Partially Favourable Response
4(2). Cctv	234	Partially Neutral Response
4(3). Incident report	176	Partially Neutral Response
4(4). Fire equipment	270	Partially Neutral Response
4(5). First aid box	251	Partially Neutral Response
4(6). Locks and bolts	<b>304</b>	Partially Favourable Response
4(7). Maintenance report	111	Partially Unfavourableness Response

Where, MAX: (5\*20) = 100, most favorable response, AVERAGE: (3\*20) = 60, neutral response, and MIN: (1\*20) = 20, most unfavorable response

**Inference:** Inmates mostly prefer security guard and even CCTV as their essential safety facility.

**Conclusion:** Maintenance report and incident reports were not at all maintaining and they are not available within the hostels in most cases.

4.2.2 Measuring the respondent’s favorableness for the following sentences:

**Table3: Measuring the respondents favorableness**

Q10 (1). Security guard available round the clock	264	Partially Neutral Response
Q10 (2). Cctv with at least 15 days of recording facility	236	Partially Neutral Response
Q10 (3). Mobile based app for safety	236	Partially Neutral Response
Q10 (4). Feedbacks used as inputs for improvements	323	Partially Favourable Response

Where, MAX: (5\*20) = 100, most favorable response, AVERAGE: (3\*20) = 60, neutral response, and MIN: (1\*20) = 20, most unfavorable response

**Inference:** Feedbacks are mostly used for improvement of safety and security in hostels.

**Conclusion:** The hostel lacks all the facilities like security guard available round the clock, CCTV with at least 15 days of recording facility, mobile-based application for safety. Has a partial Favorable response to feedbacks used as inputs for improvements. So, there is no proper maintenance of facilities for safety.

**4.3 Correlation coefficient:** Methodology adopted for analysis using Correlation :

4.3.1 Correlating allowing unauthorized person to enter into the hostel premises with feeling of safety in hostels

**Null Hypothesis:** There is no significant relationship between allowing unauthorized person to enter into the hostel premises and feeling of safety in hostels.

**Alternative Hypothesis:** There is a significant linear relationship between allowing unauthorized person to enter into the hostel premises and feeling of safety in hostels.

Coefficient of correlation value obtained was 0.179275

Formulae for calculating correlation: =CORREL (array1, array2)

**Table4: Correlating allowing unauthorized person to enter into the hostel premises with feeling of safety in hostels.**

	Allowing unauthorized person to enter into the hostel premises	Feeling of safety in hostels
Allowing unauthorized person to enter into the hostel premises	1	
Feeling of safety in hostels	0.179275	1

**Inference:** The correlation coefficient is positive between allowing unauthorized person to enter into the hostel premises and feeling of safety in hostels and the variables are weakly correlated as  $0.179275 < 0.5$ . Therefore, we accept  $H_0$ .

**Conclusion:** If any unauthorized person enters into hostel premises, inmates are feeling unsafe.

4.3.2 Correlating communication with inmates in an emergency with feeling of safety in hostels.

**Null Hypothesis:** There is no significant relationship between communication with inmates in an emergency and feeling of safety in hostels.

**Alternative Hypothesis:** There is a significant linear relationship between communication with inmates in an emergency and feeling of safety in hostels.

Coefficient of correlation value obtained was 0.174439

Formulae for calculating correlation: =CORREL (array1, array2)

**Table5: Correlating communication with inmates in an emergency with feeling of safety in hostels.**

	Communication with inmates in an emergency	Feeling of safety in hostels
Communication with inmates in an emergency	1	
Feeling of safety in hostels	0.174439	1

**Inference:** The correlation coefficient is positive between communication with inmates in an emergency and feeling of safety in hostels and variables are weakly correlated as  $0.174439 < 0.5$ . Therefore, we accept  $H_0$ .

**Conclusion:** Even though the hostel management was communicating with inmates in an emergency, inmates were feeling unsafe.

4.3.3 Correlating corrective actions taken when necessary with feedbacks used as inputs for improvement.

**Null Hypothesis:** There is no significant relationship between corrective actions taken when necessary and feedbacks used as inputs for improvement.

**Alternative Hypothesis:** There is a significant linear relationship between corrective actions taken when necessary and feedbacks used as inputs for improvement.

Coefficient of correlation value obtained was 0.1003

Formulae for calculating correlation: =CORREL (array1, array2)

**Table6: Correlating corrective actions taken when necessary with feedbacks used as inputs for improvement.**

	Corrective actions taken when necessary	Feedbacks used as inputs for improvement
Corrective actions taken when necessary	1	
Feedbacks used as inputs for improvement	0.1003	1

**Inference:** The correlation coefficient is positive between corrective actions taken when necessary and feedbacks used as inputs for improvement and the variables are weakly correlated as  $0.1003 < 0.5$ . Therefore, we accept  $H_0$ .

**Conclusion:** Corrective actions may or may not based on feedback that means feedback is either not taken or taken only for record and not implemented.

## 5. CONCLUSION AND RECOMMENDATIONS

In conclusion, findings from this study show that there is non-availability of basic facilities that should be maintained and whatever is available within the hostels are not operating properly. From analysis we observed that security guard, locks and bolts are mostly available and Maintenance report, Incident report are mostly not available in the hostels. Maintenance of existing safety equipment is not being perceived as important for security of inmates. Mobile-based application for safety was found to be desirable. We also observed that hostel management was not maintaining at least 15 days of recording facility for women safety. The maintenance of hostel for safety and security is the process of keeping it in good condition by regularly checking it and repairing it when necessary. Incident reports give an input for proactive measures that can be taken to prevent any future incidents. Healthy communication between inmates and hostel management makes inmates feel better to stay, they may feel free to tell about any issues occur in hostel. Hostel management should consider the complaints given by inmates and make correctives actions accordingly.

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