

REVIEW OF LINEN AND LAUNDRY SERVICES AT GMC JAMMU: AN OBSERVATIONAL STUDY

Clinical Research

Dara Singh

Archana Kotwal

Randhir Singh

ABSTRACT

Aim: The aim of this study is to observe and provide recommendations for better linen and laundry services

Materials and Methods: this study was an observational survey. Mixed methodology was used to observe physical and organizational aspects of linen and laundry facilities available at GMC, Jammu.

Results: there were certain deficiencies, one can safely assume that in spite of certain deficiencies in the equipment, manpower and process, the linen and laundry services at GMC Jammu are providing a satisfactory service to its users, both patients and staff.

Conclusion: Few recommendations were made in terms of better infection control, increase in staff, better occupational hazard safety, and training of in-service staff.

KEYWORDS

Linen, laundry, washing, sluicing

Introduction:

Hospital System is a hierarchical chain of system and subsystems interconnected and interdependent having clear objectives at each level of the system or sub systems, obtain enough input from its environment to offset its output and operates with varying process or methods to achieve the ultimate objective of the system. The outcome of patient care is a result of providing efficient and appropriate medical, nursing and allied care along with provision of good hygienic food, clean linen, safe environment, congenial atmosphere and good interpersonal relationship. The importance of clean environment and linen for the proper patient has been stressed since the inception of hospital. As early as the 3rd and 4th centuries B.C, the Ayurvedic Physician of Ashoka era were required to wear clean and white clothes. The hospital of the early Egyptian as well as the Muslims era paid great stress on cleanliness of patients and their clothing. However, In india, the contract "Dhobi" or washer man system is prevalent in most of the hospital since time immemorial. Proper Linen & Laundry Service contributes to Patient comfort and satisfaction, Aesthetics, Public relations.

Materials and methods:

This observational study was carried out in Government Medical college, Jammu with following objectives in mind:

1. To study physical facilities available at GMC Jammu J&K.
2. To study the Organisation and staffing in Linen and Laundry services at GMC.
3. To study the Laundry Process and Operational Aspect of washing Linen.

This was carried out by Mixed methodology, using

1. On the spot-personal visits.
2. Self Assessment.
3. Face to Face Interview with Staff and Manager.
4. Collection of data from Record Books and Questionnaire.

Types Of Information Collected:

1. Physical facility available at GMC Jammu.
2. Number of equipments
3. Human resources and Materials
4. Laundry Process
5. Organizational Structure of Linen and Laundry services at GMC jammu.

Results:

Physical Facilities Linen and laundry services is located in the ground floor, at the back side of hospital Complex, and has unidirectional flow with separate entrance and exit. It has surface area of 2700 sq ft and functions as below:

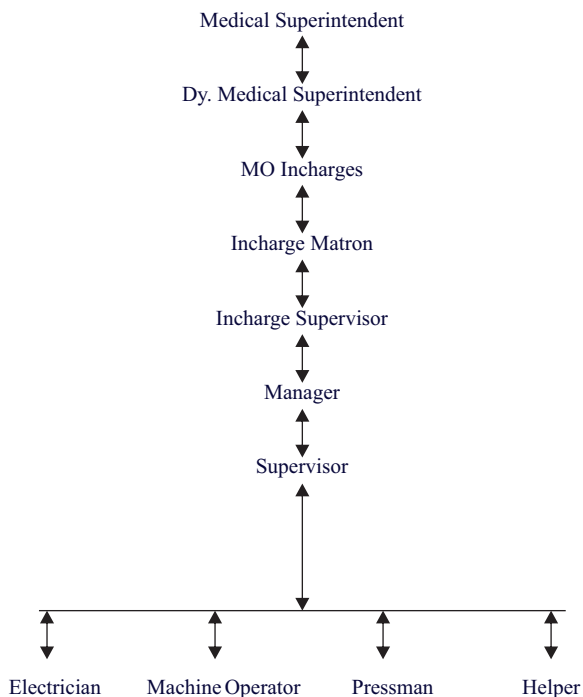
Reception Bay → Sorting Area → Washing Area

Hydro extracting drying → Iron area → Clean storage area → Issue Bay.

Equipment Available (No.):

1. Trolleys - 30
2. Washing Machine - 10
3. Hydro Extractors - 7
4. Driers - 8
5. Hand press with Tables - 2
6. Single Rollers Large Size - 2
7. Flat press - 1
8. Sluicing Machine - 1

The organizational structure of linen and laundry services is shown below



Organization:

The organization chart clearly explains the hierarchical network as well as span of control exercised at various levels of suspense.

There are also definite-channels of communication, well defined job specification, job description on similar pattern as recommended by institute of science & technology 1st university of Michigan USA for hospital staff methodology.

Washing Formula:

For 50 kg of given--- 100 gm of detergent

250 gm of soda ash

50 gm of clax

5 gm of neel

10 gm of tinopal

Drying: (60-70c)

Man power: 28 personnel of various categories

Steam: is supplied at 70- 80 degree which is less than the norms given by Mac Gibony's should be atleast 178 c with 100 Psi.

Other Materials: used are bleaching powder, surf and clay, neel, tin opal whitening agent calculated on the basis of average driven load of Pt.

Discussion:

The study was undertaken to review the linen and laundry services at GMC Jammu, including Physical facilities, and organizational structure.

The GMC, Jammu laundry is rectangular in shape having total area of 2700 sq. Feet with work flow on the principle of, design should follow the function. This unidirectional layout allows flow of the product with least chances of contamination. Other factors that must be kept in mind were: Lights were free from glare & shadows and there was sufficient amount of daylight in laundry hall. Three big size Exhaust fans were provided for comfortable environment though out the year to enhance personal comfort efficiency of the workers. Workers are instructed not to smoke in the laundry or while working and no electrical equipment should be left on after working hours. Fire Extinguishers were not located in the linen and laundry section & workers were also not trained to use these fire extinguishers, which made them to rely on security & firefighting personal. Wasted generated in the linen and laundry service is transformed to the main drainage of the hospital solid waste generated in disposed of as per the norms of solid domestic waste generated in other areas of hospital.

Delivery and collection is done by the laundry personal using separate trolleys for each purpose after receiving the given in laundry is sorted and inspected if it is infected, then it is processed through sluicing machine, by washing in cold water to remove dirt, blood & body fluids etc deposited on cloths. Washing contributed action of detergents and mechanical movements of cloths through water is required for optimum removal of rift from cloths the standard input for this operation is steam for heating and following formula is followed to calculate the amount of various materials required timer set for one cycle is 30 mm, followed by drying, tumbler agitates the hydro-extracted mass of washing given inside a cylinder so that steam passes through the cloths at high temp this result in drying of given. This was followed by Calendaring/ hot ironing pressing or handle ironing. The location, space, design and layout etc) of the linen and laundry services at GMC, Jammu is in accordance with the prescribed engg. and guide linen. All the equipment was semiautomatic, except sluicing machine which was not available and inadequate Safety measures to present occupational hazards. Also, the study of manpower of linen and laundry revealed that only 28 personnel of various categories are working in Dept., which is very less than the norms given by Mac Gibony.

Conclusion:

Thus on the basis of the finding of the current study one can safely assume that inspite of certain deficiencies in the equipment, manpower and process, the linen and laundry services at GMC Jammu is providing a satisfactory service to its users, both patients and staff. Although The following recommendation needs to be considered at various levels which are:

1. The programme of in-service training for the staff of linen and laundry services needs to be organized on regular basis.
2. Sufficient staff to be provided to cater the need.
3. Awareness of staff regarding occupational hazards need to be improved.

4. Infection control committee or a committee for linen and laundry services take the sample for microbial count and take required measures to ensure the quality services provided by the linen and laundry department.

References:

1. Sharma RK, Sharma Y. Support Services. Handbook in Hospital Administration Making Difference 2003; 5:268-89.
2. Diploma in Hospital and Health Management Course Management of Supportive and Utility Service, Ninth Edition Academy of Hospital Administration, New Delhi 1998, 109-121.
3. Sakharkar BM Role of Hospital in Health Care, Principles of Hospital Administration and Planning 1st Edition, Jaypee Brother New Delhi 1998; 1; 1-19.
4. McGibony, Principal of Hospital Administration, 2nd Ed. Putnam's Sons, New York. 1969.
5. Amin Tabish, Planning of Laundry Services in a Hospital Laundry World. 1993; 3(1); 16-27
6. Institute of Science and Technology, University of Michigan USA Hospital Staffing Methodology Manual MM2 laundry 1966.
7. Hospital Tool; Laundry module U.S Dep
8. Kraft DP; favero, M.S. in Guidelines for protecting the safety and health of healthcare workers.