Department of Maintenance in the Army Hospital: An Overview

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History

Ever since the hospital was constructed in the periphery of Chhauni on 15th Poush, 2043 BS and on 2047 BS, it was completed. Thus, the newly built hospital started its work in progress after its full completion and shifted to this area. This hospital comprises almost all the facilities and necessities as one requires generally, like post accident centre, MRI, pathology, OPD, special VVIP suites, and all depts. which are essential for the basic requirements of the hospital environment and new equipments obtained from French Protocols. So to say, today this hospital is the most sophisticated one across the country.

There were relatively increasing number of patients and inadequacy of old hospital which was near the Tundikhel and it still exists there in a small area (the then Tribhuwan Military Hospital established in the loving memory of the soldiers who lost their life in the 1st world war), and the new concepts were came to replace the old one and construct the new hospital full of state of the art technology. Therefore, this new Birendra Hospital came into existence with a view to fulfill the new demands in course of time and space of the military vision.

Nowadays this hospital has been developing new technologies with the passing of time and requirements. Using the Army’s own manpower and technicians, this is constructed so that decade’s long awaiting dream of Nepalese Army finally came to the presence.

With its 300 or more beds, today hospital has its own facilities for almost all necessities, like all depts ambulance, medicines, equipments and buildings and the growing further requiring demands as per the needs of the hospital and so on. Tribhuwan Military Hospital before this, had a different history late back to 1926AD which was built under the direction of Rana PM Chandra Shumsher with a view to commemorate the large no of soldiers who sacrificed their lives in the 1st world war. The Chief Engineer who constructed this hospital was Col Kishore Narsingh Rana and he involved in constructing this hospital fully for about 2½ years. The then all Army personnel as well as other gentlemen were happy to have this monumental hospital and all could get benefits after severe ailments as well as other diseases attacked on the build.

Physical Facilities

a. This hospital has almost 60 ropanies land on its ownership and all its structures and substructures have been made by the use of Army’s own super manpower and other relative accessories as well. This hospital has other facilities also like water supply, full electricity supply though load shedding, modern facilities relating to hospital appliances and all medical treatments and their departmental rooms, doctors and their teams, technicians etc. for soldiers and other patients separate buildings and rooms, doctors’ quarters and mess and so on have been made as per requirements and in the future other facilities will also be made.

b. Contrary to these aforesaid facilities, this hospital has to build other buildings for ladies, garage and maintenance separate building and workshop for quick repairing all medical equipments and other maintenance works. Perimeter wall has yet to be built for outer defense and hospital has its own
maintenance manpower for the daily works inside it.

Main Hospital Premises

This is the main central attraction of the hospital area which is located near the Swayambhu Nath Temple and Army's topmost glory so far as concerned. This hospital has a key concept of Nepalese art and architecture and fusion of Nepalese Engineering vision and style. It has been constructed under the concept of medical symbol and three plus wings imaginings. At the side of the old structure, recently the newly constructed building known as administrative structure has been attached with its architectural background. Main entrance has been associated on the south and the whole structures and buildings have been surrounded by the gravel road made peripherally for defending purpose. Nearly 40 thousand sq ft area covers by the structure of this hospital and most of these structures inside are made out of the modern techno like aluminum structures and so on. High level facilities like sanitation, electricity supply and modern bathrooms and other treatment methodologies are additional privileges to the patients and soldiers so far and this will be made further development in the coming days.

Maintenance Dept. and its responsibility

With the initialization of newly built most state of the art hospital so far in Nepalese history especially in Nepalese Army on 2049 BS under the base of Lord Swayambhu Nath, there is a small single storied building in the eastern part of the main hospital building with its meager strength it has been established. On 2049BS the then hospital CO Bde Gen Madan Man Mall laid the foundation stone of this building for the maintenance purpose. The duties and responsibilities of this dept are highly important so far as the hospital is concerned. In this dept, though there are relatively low in strength and not adequately provided equipments they are using their knowledge and skill for the maintenance of the hospital from the early beginning to this day. Main responsibility of this dept is given under -

1. Daily reports of the machine and equips by the concerned technicians.

2. Daily and periodical supervision of biomedical equipments in order to functioning at the time of necessity.

3. All the works to be repaired by the civil engineering groups in case of ordered by the concerned department and minor maintenance works to be done immediately as soon as possible under the officers’ call.

4. Daily and weekly duty as per the hospital routine.

5. Repairing of heavy equipments i.e. electronic as well as mechanical.

6. Technical advice to the doctors and other concerned persons.

7. To assist the administration at the time of equipments' supply and tender and during the time of opening after supplied by the contractor.

8. To supply the water and electricity all over the hospital wards and outer building of the messes and maintenance works at the plants and other projects.

9. To estimate the works to be repaired during the time when it is deemed necessary on the demand of the departmental call.

10. Miscellaneous repairing works inside the hospital building when needed.

Technical Manpower and Budgeting

To run the office smoothly and steadily, it is very important to have a good knowledge and experienced technical team. For this purpose to be fulfilled we have to manage a good office building with modern tools and workshop. And on the other hand, there must be a budget allocation to the maintenance office for it can do the emergency maintenance works without dillydally. A qualified technical team must be prepared to handle the situation under control; otherwise the works can't be done on time.

Strength and line Hierarchy

Common line hierarchy and maintenance strength must be as follow.
The structure of maintenance strength and manpower is quite low in number and quality where a few number is insufficient in repairing works and for the new projects to start and make. For instance, a civil branch needs more than 30 persons for day to day works inside the daily routine work whereas other biomedical and electronic branches need extra 30 persons to perform the works satisfactorily. A good strength of this dept has to be considered to perform the given task to be accomplished well in time.

**Water Supply and Sewage Line**

Within hospital area there is a government water supply line, so that hospital itself has made a good water supply management through deep boring and other supply means, that is from the outside of its area. Presently the supply has been made from Swayambhu Barud Khana and Sikshan Paksha area which provides relatively sufficient water. We have nearly 1 lack litres capacity water storage tank, from where we distribute the water inside hospital wards and the buildings outside hospital, but inside its area using our most sophisticated water filtration plant.

On the other side, we have managed a good sewage line to pass the trashes outside the main sewage supply line so that presently there is no problem of sewage distribution line inside this hospital for another 20 years.

**Motivation and Initiatives**

Cause to work immediately, a most significant object is motivation and initiative, without the proper use of these terms one can’t do the required job and duty properly. So for getting these terms fully utilized, technicians must be refreshed by way of giving them short-term courses and sending them to the foreign country like UN and any other countries to training. Therefore, their promotion and other minor facilities are of vital things during the time of service, so everyone can get maximum satisfaction only when these things are considered.

**Difficulties and Challenges**

Over the period of time, maintenance dept has been facing a difficult situation during the time when it has to be done some vital emergency works to be completed within a short span of time. Medical equipments and other building structures which have to be repaired within a difficult time. We have not yet found the most essential handy tools and equipments which are very crucial to maintain the appliances and physical structures. A modern workshop and office building with all the necessary tools is very essential for the hospital leaving other things behind. A good store house is needed in order to stack the engineering goods which can be used in the time of needed. An experienced team or group of technicians must be kept in a standby position that can do the job immediately after the order. A computer lab, store, bathroom, duty room, officer’s rooms and basic common room attached with the main maintenance building is highly required to fulfill the situational difficulties under control. Some practical difficulties as for an example is if a water pump is broken, then it should be taken away for this repairment and likewise other things also are there. This simple thing if we make inside the building in

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### Department of Maintenance (60)

- **Civil Engineer**: 30
- **Biomedical Engineer**: 15
- **Electronic Engineer**: 15
- 1. Plumber
- 2. Painter
- 3. Electrician
- 4. Carpenter
- 5. Bricklayer

Communication Tech

- 3. Electrician
- 4. Carpenter
- 5. Bricklayer

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case of providing the tools and technician, we can fix it as soon as possible. So the repairing works have been delayed due to the lack of workshop and experienced technical person.

**Conclusion**

Maintenance works are very pivotal to the modern facilitated hospitals anywhere on the earth, not only in the hospitals, but also to the industries and factories. Since there are modern technologies installed, these works have to be done naturally, for this we have to make a good maintenance team or groups to work hand in hand together. New technologies to install and to repair are a big challenge for the untrained persons since they are not familiarised with those new scientific appliances. So giving them orientation class and short term technical training on such subjects, they can do the works well. This should be taken into consideration before going through the working procedures.

These are the possibilities of work to be done by the hospital, however, the maintenance dept has been doing many successful works during the years in the past and it will be continued for the days to come. Let's hope for its betterment and advanced with the passage of time.