ARMED FORCES COMMAND AND STAFF COLLEGE

THE NIGERIAN ARMY MEDICAL CORPS

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1. The Nigerian Army Medical Corps (NAMC) is one of the combat service support elements. It is the second of the 4 major services and the only major administrative service. The corps has the overall responsibility of providing Medicare for the NA. The overall control of the medical services is vested in the Commander Nigerian Army Medical Corps. He is responsible to the Chief of Army Staff (COAS) for the efficiency of the medical, dental, pharmaceutical and nursing services provided by the Corps. He exercises his responsibilities from the Corps HQ in Lagos and through senior officers of the Corps at formation HQs.

2. In discussing the roles of the NAMC, the lecture will highlight on the system employed in the field for the management of casualties. In doing this, the lecture will cover the organization of the NAMC, the responsibilities of the Corps and principles for battle casualties. Thereafter, it will be rounded up with casualty evacuation.

AIM

3. The aim of this lecture is to discuss the organization of the NAMC by describing the system employed in the management of personnel.

ORGANISATION OF THE NAMC

4. The NAMC is organized into the Corps HQ which is commanded by the Commander NAMC and the Corps school at Lagos headed by the Commandant NAMS, who is responsible to the Corps commander. The Corps’ units include Company Aid Post (CAP), Regimental Aid Post (RAP), Field Ambulance (Fd Amb), Main Dressing Station (MDS), Advance Dressing Station (ADS) and Field Hospital (Fd Hosp). You can read the details of the composition of these units and activities that take place therein in your precise Organisation 1-13. However, some of these activities will be highlighted while discussing the casualty evacuation system.

5. The system for collecting, sorting, treating and evacuating the sick and wounded is designed to remove casualties as quickly as possible from units. This will enable them to be evacuated far from the battle area as necessary to enable effective treatment to be carried out. Diseases, most of which are preventable, have always caused more casualties in war than enemy action. Measures to maintain the health of soldiers are the responsibility of commanders at all levels but medical officers are available to advise.
RESPONSIBILITIES OF THE NAMC

6. The first task of NAMC is to advise commanders at all levels on matters affecting the health of their troops. Clearly, the maintenance of health is a function of command. Although regimental officers are not expected to act as doctors, it is their responsibility however to ensure that their men get adequate rest, a reasonable diet, good accommodation and proper clothing. The battalion medical platoon gives advice on these at the battalion level, while the OC of the affiliated Medical Reception Station (MRS) provides this service with the assistance of his hygiene platoon at the brigade level.

7. The second responsibility is perhaps the most obvious one and that is the care and treatment of the sick and wounded in peace and war. In war, this includes collection and evacuation of casualties. The third responsibility is the supply of medical and dental stores and equipment to all units. This covers drugs, dressing and medical equipment. Finally, NAMC is responsible for the implementation of the medical plan when it has been agreed upon by the staff after medical advice has been considered.

PRINCIPLES FOR BATTLE CASUALTY

8. Past experience has shown that in any operation the number of sick usually exceeds the number of battle casualties. However, the organization and deployment of medical units in war is related to the battle casualty as there are certain surgical principles involved. The first is that the really serious casualty, such as a major abdominal or chest wound, must be operated on by a surgeon within 6 hours of the injury if he is to have a reasonable chance of survival. It is at this stage that wound infection sets in.

9. The second principle is that, having had the first emergency operation, certain casualties are still likely to die, should they be moved within 7 or 8 days. In an ideal situation, we would not move them but, depending on the number of casualties arriving at field hospitals, it may only be practicable to hold serious abdominal cases and to move others on within 12 hours. The lesson we draw from this is that surgery in the field should be carried out as far back as possible to ensure security of the medical unit and casualty. On the other hand it should be done sufficiently far forward for the serious casualty to reach the surgeon within 6 hours of the injury.

10. Thus the medical problem in the forward area is to collect, sort, classify and evacuate the casualties as quickly as possible. In addition, facilities must exist within the division to treat the minor sick and wounded so that they can be returned to their units in order to conserve manpower. There is a need to provide various echelons of medical support, starting at the most forward area and working back to the
CASUALTY EVACUATION

11. Let us now have a look at the medical support to be found on the battle field and how the casualty evacuation system works. As usual we will start at the sharp end by considering the support available within the units. We are really concerned with 2 types of casualty:

   a. The minor casualty who requires a fresh wound dressing or similar treatment that will allow the soldier to fight on until the heat of the battle is over and he can be spared to undergo treatment at the RAP.

   b. The more serious casualty, which requires immediate first aid followed by speedy evacuation which can make the difference between life and death.

FIRST AID

12. In the most forward area, at the platoon position (the point of impact if you like), there is no integral medical support whatsoever and at the moment of injury the battle casualty is entirely dependent on the first aid that his colleagues can offer. This is why all ranks in the combat zone must know elementary first aid.

COMPANY AID POST

13. Each company has a small detachment allocated from battalion resources, which is likely to include trained medical personnel. Evacuation from the company aid post will be by either stretcher bearer or ambulance. The ambulance vehicle will be wheeled or in the case of units in the mechanized and armoured brigades, it could be tracked and based on a standard armoured personnel carrier chassis. Their equipment and training enable this small team to give or improve on first aid with the immediate aim of returning casualties to duty or making them fit for evacuation.

REGIMENTAL AID POST

14. Moving back to the battalion we find the regimental aid post (RAP) run by the battalion Medical Officer (MO). The RAP is usually deployed in the area of A1Echelon where the MO has good communications forward on the battalion net to the CO and coy comds and rearwards on the brigade administrative net to the CO of the supporting field ambulance. It may also be located near the battalion HQ. Remember that it is the medical officer and the battalion commander who decide the final allocation of medical
resources to companies.

15. You should appreciate the limitations of the RAP and understand what treatment it can provide. Battle casualties will receive sufficient treatment to make them fit for further evacuation and it is here at the RAP that clinical documentation starts. See Fig 1. A field medical record card is attached to each casualty and this shows the nature of the soldier's injury and the treatment received at each stage of evacuation.

16. Now that you know the medical resources integral to the battalion, I hope you appreciate why emphasis is on first aid treatment and speedy evacuation of casualties. You should note that the system enables the minor casualty to continue fighting and allows the more serious casualty to survive until he reaches the operating theatre.

**FIG 1: DEPLOYMENT OF RAP IN THE FIELD**

17. If units are to retain their mobility and capability to fight, causalities must be sorted out as quickly as possible. There is, therefore, the need for a medical unit within easy reach of the RAPs and capable of dealing with a number of casualties – this unit is
the field ambulance. It has 3 tasks which are:

a. To clear casualties from the RAPs.

b. To form a dressing station which can act as a focal point for all the casualties in the area and from which casualties can be evacuated to more static locations.

c. To provide a medical reserve to supplement the resources already deployed and to plug any gaps that occur in the medical support.

18. There is an ambulance transport platoon which may be commanded by a Nigerian Army Corps of Supply and Transport (NACST) officer in which there are 18 ambulances. These ambulances are provided to operate forward of the forward BAA and to clear RAPs of casualties. In the opening stages of a battle it may be considered prudent to attach some of these ambulances to the leading battalions, but this will depend on the overall estimate of likely casualties, which is a G staff responsibility.

19. The next task is to provide the medical reserve and supplement those resources already committed; to do this there is a collecting company. The company has 6 collecting sections each of which may contain a medical officer and 8 medical assistants. A typical deployment for these sections is shown on the screen with some sections deployed forward with each of the battalions. In effect, this gives them 3 additional RAPs which increases the first line support and makes it possible to leap frog them as possible. Some sections may man helicopter or fixed wing landing sites, reserve demolitions or river crossing sites, while some sections are held as medical reserve or deployed at the formed field ambulance to render extra assistance there.

20. The main element of the unit, called the MDS is formed by combining together the unit HQ and the clearing platoon. See Fig 2. The MDS is likely to be found in or near the forward BAA; that is some 8-10 kilometers behind the leading battalion. The major criterion for its deployment is not its geographic location but the need for casualties to reach it within 2 hours of evacuation time from the point of injury. The details of the component parts are:

a. The unit HQ contains both the command post and the administrative elements such as the QM who controls all the medical and other stores, the unit transport, NAEME fitters, pay personnel and cooks.

b. The clearing platoon is where we find all the medical expertise that is needed to man both the reception and treatment departments. When casualties
are brought into the reception department they are examined by a doctor who decides on their order of priority for evacuation. The most urgent cases are sent back to the surgeon first. The field medical record cards are checked. Each admission is recorded so that Field Records can be notified daily and reinforcements can be planned for and provided, and next of kin notified. The minor cases and those not requiring any further treatment are taken to the outpatients department. Here they can rest and have a meal until the MTO can arrange for them to be taken away. Many casualties, however, require further treatment and this is carried out by the medical officers and assistants in the treatment department. Although at this stage the treatment is still essentially first aid, the dental officer can deal expertly with jaw and facial wounds. The MO on the other hand can give transfusions of fluids to those who have lost a lot of blood or who are very shocked. Splints can be improved upon and generally, the patients can be stabilized for the long journey back to the surgeon.

c. The ambulance platoon is located with the MDS and the Medical Transport Officer (MTO) is responsible for controlling the evacuation department. From this location the ambulances go forward to collect casualties from the RAPs and it is to this department that the ambulances needed to evacuate the casualties report. You will note also that provision is made for the use of helicopters. For the journey between RAP and MDS we might expect to use a light helicopter with 2 litters fixed to the skids, possibly similar to the Sioux helicopter. For the journey from MDS to Field Hospital we might have support helicopters such as PUMA, which can carry 6 stretcher cases and 4 walking wounded.
21. Finally, one or 2 additional points about the field ambulance in war are:

   a. As there is no medical representation on the bde HQ staff, the CO of the unit acts as an adviser to the brigade commander. As such, he works with the COS in determining casualty evacuation policy and with the SO2 G1/G4 and the CO Fd Amb sorts out problems of unit location and protection, arrangement for air evacuation and so on.

   b. Although it is usual for one dressing station to be formed (that is, the MDS), on occasions, there may be need for a second if the medical support is to keep up with the battle (whichever way it is moving). This can be achieved by splitting the MDS into 2 halves and adding to each part one of the collecting sections - thus forming an MDS (where the CO is) and an ADS. However, in doing this the medical support at any one location is greatly reduced and part of the medical reserve is committed.

   c. The titles of the various sub-units are somewhat confusing. Remember that the clearing platoon provides the medical expertise within the MDS while the collecting company is a medical reserve available to supplement any other medical resources which are under strain.

   d. The MDS has no casualty-holding capability; it exists only to sort, classify and evacuate casualties as quickly as possible.

22. The normal allocation of field ambulance is one per brigade. See Fig 3. We have already quoted some examples of why centralized control is necessary if the maximum use is to be made of these medical resources. An example is the deployment of collecting sections and the control of ambulances. See Fig 4. In addition, one of the field ambulances may be required to deploy a dressing station in the DAA to look after divisional troops.
FIG 3: ORGANISATION OF A FIELD AMBULANCE

HQ

CLEARING PL

AMBULANCE PL

HYGIENE PL

COLLECTING COY

SECT SECT SECT SECT SECT SECT SECT SECT
FIELD HOSPITAL

23. The Commander of the Fd Hosp is co-located with div HQ. See Fig 5. He normally operates from main divisional headquarters where he can advise the divisional commander on battle casualties, health and morale problems. He may however often be with his staff who are always located at divisional rear HQ and will tie in closely with the AQ Cell located there.

24. It is the commander ffd hosp, who controls the evacuation resources within the division and ensures that extra transport is made available in area where battle casualties are high. We should remember that serious casualties should reach the surgeon within 6 hours of injury. It may be necessary to use support helicopters for some casualty evacuation and the commander field hospital is ideally placed at divisional headquarters to request and co-ordinate their use. You should remember that he has 3 staff officers grade one on his staff list who are responsible for medical, dental and nursing matters.

25. So far, the treatment at the MDS has been only sufficient to ensure that the casualty is fit for evacuation out of the immediate battle area. The casualty has to travel some 100 kilometers or so to the fd hosp for further treatment and this should not have taken more than 6 hours from the time of injury. See Fig 6. Now, he has reached the stage where the post-injury shock is wearing off and surgery is necessary.

26. The fd hosp, which is the first unit in the evacuation chain where surgery will normally be carried out, needs to be fairly static. By choice, it would be set up in an existing hospital, school or large building where there are rooms sufficiently large to accommodate the wards, operating theatre and so forth. However, if necessary, it can
be set up in tent marquees on about 2 acres of ground, but as it has little or no transport nor labour of its own, it requires assistance (notably transport) from other units to function.

27. The exact allocation of fd hosp is not firm but it is likely to be based on the allocation of medical centres in each of the 4 divisions. Indeed, it is possible that these static medical centres will in wartime provide fd hosps. Each hospital could have 4 x 50 bed wards. In these, the patients can be held until fit for further evacuation. It is now believed that the average holding period may be as little as 12 hours before the patient is moved to a more static hospital behind the theatre. Finally, you will notice that there are other specialist facilities available such as radiography, pathology, dental as well as medical specialists to deal with battle and non-battle casualties.

28. Evacuation from dressing stations to field hospitals and from field hospitals to general hospitals is organized by the commander fd hosp co-located with div HQ, using third line transport or any other suitable resources available. If sufficient ambulances are not available, then empty load carrying vehicles can be used on their way back to reload. See Fig 7. Although this could delay the replenishment cycle and the vehicles could be a bit less comfortable for the patients.

29. If in spite of all, it becomes impossible to evacuate casualties to the fd hosp for surgery within 6 hours either because a unit or formation has suffered particularly heavy casualties, or if the evacuation system becomes clogged, the Comd fd hosp can deploy Field Surgical Teams (FST) and Field Transfusion Teams (FTTs). The FST includes a surgeon with sufficient staff and equipment to set up an operating theatre with limited facilities for post-operative care. One way of achieving this is to attach the teams to a MDS when the whole set up would be known as ADS. To complete the story, once a soldier has recovered from his injury or sickness he returns to battle via the Army Reinforcement and Replacement Unit (ARRU).
FIG 5: ORGANISATION OF A FIELD HOSPITAL

- HQ
- RECEPTION
- 4 X 50 BEDS WARD BLOCKS
- SURGICAL
  - X - RAY
  - PATHOLOGY
  - DENTAL
- PHYSIOTHERAPY
30. There are 2 other responsibilities undertaken by NAMC in the combat zone and these will be expatiated in subsequent paragraphs. It was stated earlier that NAMC is responsible for the supply of medical stores to units and installations within the divisional area. The first unit to concern us in this chain of supply is the sub-depot of the Central Medical Stores (CMS) which will be deployed somewhere in the rear DAA but close to one of the field hospitals. This unit supplies the field hospitals with medical stores and it also sends stores forward in empty ambulances to MDS deployed in the brigade area. At the MDS, the medical quartermaster will distribute medical stores to the various departments of his own unit. He will also use the empty ambulances returning to the forward units to distribute medical stores to battalion RAPs. See Fig 8. I hope that this explains the chain of supply of medical stores.

31. The last aspect of medical activity is the field hygiene. All units within the division require advice and assistance with problems of sanitation, water supply and personal hygiene. This is provided by the field hygiene platoons which are trained and equipped to offer practical assistance as well as advice to solve problems which may be
beyond the capacity of the units.

CONCLUSION

32. In conclusion, there are 4 main points that I want to emphasize. First, commanders are responsible for the health of their troops. Second, there must be a very close liaison between all branches of the staff and the medical service. The medical service staff must be kept fully briefed on the current operational situation, future operations and estimates of casualties. Note that all 3 branches of the staff are involved: G staff in the estimation of casualties; A staff in making the medical plan on the advice of the commander field hospital; and Q staff in arranging transport for evacuation of casualties.

33. Thirdly, remember that the problems in the forward areas are those of collection, sorting, simple treatment and, if necessary, evacuation to a surgeon within 6 hours for further management. Fourthly, medical exercises. At present, too little attention is paid to realistic casualty evacuation exercises. However, they are not particularly difficult to organize and the soldiers taking part usually enjoy being made-up as casualties and then treated or evacuated. So if you are ever in a position to influence matters, please insist on realistic medical field training.