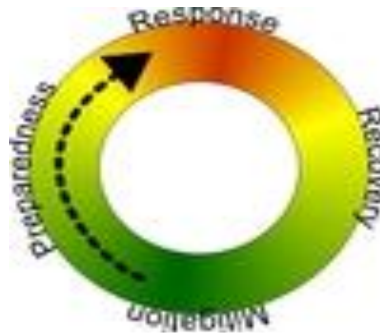

Report on

Workshop (Demonstration& Talk)
on
"Triage management &Transportation of casualty"

Organized & Conducted by

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Faculty of Medicine (U)
At
Hamdard Public School
On the occasion of celebration of
"Disaster Management & Vigilance Awareness Week"
(27.12.2012)

Report on workshop (Demonstration & Talk)
On
"Triage management & Transportation of casualty"
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Dr Syed Mehtab Ali,Dean Faculty of Medicine(U) and **Dr. Suhail Fatima HOD**, Dept. of Gynaecology, Obstetrics and Paediatrics Faculty of Medicine(U) has conducted a workshop at Hamdard Public School on the occasion of celebration of *"**Disaster Management & Vigilance Awareness Week"** on* 27.12.2012 at HPS auditorium. The principal Mrs Zakia ,head of Social Studies Mr KK Pandey and Mr Rehan ,teaching faculty of HPS welcome all the Faculty members of the University students of our faculties .
The following activities were performed.

- Guest Lecture on **""Method of Transportation of casualty &Triage management during any disaster- A step to reduce risks of disaster with least impact"** by Dr Suhail Fatima. HOD Gynaecology, Obs & Paediatrics . Faculty of Medicine Jamia Hamdarad

- A play and demonstrtration on method of Transportation of casualty & Triaging during disaster'' by students of BUMS IInd prof F.O.M & GNM Nursing students Jamia Hamdard.

❖ ***<u>TRANSPORTATION METHODS OF CASUALITIES</u>***

CAUTION: *Do not transport a casualty with a suspected fracture of the neck or back unless a life-threatening hazard.*

- The ***fireman's carry*** is usually used to quickly move an unconscious or disabled casualty for a moderate or long distance.

This carry leaves one of the bearer's arms free to carry a rifle, move around obstacles,and so forth.

- Move the hand grasping thecasualty's wrist to the hand at the casualty's knee.
- Grasp the casualty's wrist to the hand at the casualty's knee, freeing your other hand.
- Place your free hand on your kneeand slowly rise to a standingposition. Use the hand on your kneeto help you rise without strainingyour back.
- Adjust the casualty's body so that his weight is distributed comfortably.
- Move forward, carrying the casualty.

- The ***pack-strap carry*** is generally used to carry a conscious or unconscious casualty for a moderate distance. This carry is not used if the casualty has a broken arm.

- Raise the casualty to a standing position.
- Grasp one of the casualty's wrists and lift his arm above his head while continuing to support the casualty's waist with your other arm.
- Turn and bring the casualty's raised arm over your shoulder as you turn so that your back is to the casualty's front. Bend your knees somewhat so that your shoulder fits under his arm.
- Release his waist, grasp his other wrist, and bring that arm over your other shoulder.

CAUTION: *Hold both wrists so that his hands are in palms down position (palms toward your abdomen). Twisting his hands could result in injury to the casualty's wrists, elbows, or shoulders when he is lifted and carried.*

- Bend forward and hoist the casualty as high on your back as possible so that his weight is resting on your back.
- Walk forward, keeping bent so that the casualty's weight is balanced on your back and his feet are not dragging.

- The ***saddleback carry*** is only used for a conscious casualty who can put his arm around your neck. It is generally used to carry a casualty for a moderate or long distance

- Raise the casualty to a standing position. (Since the casualty is conscious, he may be able to rise with assistance.)
- Grasp the casualty's wrist and lift his arm over his head while continuing to support the casualty with your other arm.
- Turn so that your back is to his front and bring his arm over your shoulder. Support the casualty's waist with your other arm, if needed.
- Have the casualty put his other arm around your neck. If possible, he should grasp one of his wrists with his other hand.
- Stoop and move your arms back and around the outside of the casualty's thighs.
- Bring your hands inside of his thighs to your sides, lifting the casualty's thighs.
- Stand up and clasp your hands together in front of you.
- Adjust the casualty's weight to make the weight distribution more comfortable and walk forward.

- ***<u>TWO MEN METHODS</u>***

- **THE TWO-MAN FORE-AND-AFT-CARRY**

  Sometimes, a litter is not available and cannot be improvised. In such cases, manual carries may be used to evacuate the injured soldier. A two-man manual

- carry is usually preferred over a one-man manual carry. The two-man fore-and-aft carry can be used to move a conscious or unconscious casualty. It is not as tiring as other carries; is usually the preferred two-man carry for moving a casualty for a long distance Position the casualty on his back with his arms by his sides.
- The taller of the two bearers kneels at the casualty's head and faces toward the casualty's feet. He then slides his hands under the casualty's arms and across the casualty's chest. Then he locks his hands together over the casualty's chest.

The second bearer spreads the casualty's legs and kneels between the casualty's legs with his back to the casualty's head. He then reaches down and places his hands under the casualty's knees.

- Both bearers rise together and lift the casualty.
- Bearers walk forward with the casualty.

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- ***TWO HAND SEAT CARRY***

- The two-hand seat carry can be used to move a conscious or unconscious casualty for a short distance.
- Position the casualty on his back.
- Bearers position themselves on opposite sides of the casualty's hips and knee.
- Each bearer passes one arm under the casualty's back and the other arm under the casualty's thigh.
- Bearers grasp each other's wrists securely.
- Both bearers rise in unison, lifting the casualty.
- Bearers move forward, carrying the casualty.

- ***THE FOUR HAND SEAT CARRY***

The four-hand seat carry is only used to carry a conscious casualty that can help support himself while he is being carried. This carry is especially useful in transporting a person with a head or foot injury for a moderate distance.

- Both bearers position themselves behind the casualty.
- Bearers face each other. Each bearer grasps his own left wrist with his right hand, and grasps the other bearer's right wrist with his left hand. This forms the seat for the casualty.
- Casualty stands on his own or another soldier helps the casualty to a standing position.
- Both bearers lower their bodies so that the seat is about even with the casualty's knees.

- Casualty sits on the bearers' forearms and places his arms around the bearers' shoulders for balance and support.
- Bearers stand erect in unison, lifting the casualty.
- Bearers move forward.

➢ ***LITTER CARRY***

An improvised litter can be made using two tent poles and a poncho. Variations of this litter include using straight tree limbs or other rigid objects for the poles. When the casualty is placed on the litter, his weight will hold the litter together.

- Open the poncho and lay it flat on the ground.
- Lay two poles lengthwise across the poncho so that the poncho is divided into thirds.
- Reach in and pull the hood toward you and lay it flat on the poncho. Make sure that the draw strings are not hanging out of the hole.
- Fold one outer third of the poncho over the pole.
- Fold the other outer third of the poncho over its pole

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❖ ***Triage***

Only immediate life-saving treatment takes priority over triage.

Triage is the process of determining the priority of patients' treatments based on the severity of their condition. This rations patient treatment efficiently when resources are insufficient for all to be treated immediately. Two types of triage exist: simple and advanced. Triage may result in determining the order and priority of emergency treatment, the order and priority of emergency transport, or the transport destination for the patient.

TYPES OF TRIAGE

- **Simple Triage**

Simple triage is usually used in a scene of a "mass-casualty incident" (MCI), in order to sort patients into those who need critical attention and immediate transport to the hospital and those with less serious injuries. This step can be started before transportation becomes available. The categorization of patients based on the severity of their injuries can be aided with the use of printed triage tags or colored flagging.

- **S.T.A.R.T. model**

S.T.A.R.T. (Simple Triage and Rapid Treatment) is a simple triage system that can be performed by lightly trained lay and emergency personnel in emergencies. It is not intended to supersede or instruct medical personnel or techniques. Triage separates the injured into four groups:

- The expectant who are beyond help
- The injured who can be helped by immediate transportation
- The injured whose transport can be delayed
- Those with minor injuries, who need help less urgently

Advanced triage

In advanced triage, doctors may decide that some seriously injured people should not receive advanced care because they are unlikely to survive. Advanced care will be used on patients with less severe injuries.

Because treatment is intentionally withheld from patients with certain injuries, advanced triage has ethical implications. It is used to divert scarce resources away from patients with little chance of survival in order to increase the chances of survival of others who are more likely to survive

- **Labelling of patients**

Upon completion of the initial assessmentby medical or paramedical personnel, each patient will be labeled with a device called a triage tag. This will identify the patient and any assessment findings and will identify the priority of the patient's need for medical
treatment and transport from the emergency scene.

- **Triage tags** may take a variety of forms. Some countries use a nationally standardized triage tag, while in other countries commercially available triage tags are used, and these will vary by jurisdictional choice. The most commonly used commercial systems include the METTAG, the SMARTTAG, E/T LIGHT tm and the CRUCIFORM systems. More advanced tagging systems incorporate special markers to indicate whether or not patients have been contaminated by hazardous materials, and also tear off strips for tracking the movement of patients through the process. Some of these tracking systems are beginning to incorporate the use of handheld computers, and in some cases, bar code scanners. At its most primitive, however, patients may be simply marked with colored tape, or with marker pens, when triage tags are either unavailable or insufficient. Triage in a non-combat situation is conducted much the same as in civilian medicine. A battlefield situation, however, requires medics and corpsmen to rank casualties for precedence in MEDEVAC or CASEVAC. The triage categories (with corresponding color codes), in precedence, are:

Immediate: The casualty requires immediate medical attention and will not survive if not seen soon. Any compromise to the casualty's respiration, hemorrhage control, or shock control could be fatal.
Delayed: The casualty requires medical attention within 6 hours. Injuries are potentially lifethreatening, but can wait until the immediate casualties are stabilized and evacuated.
Minimal: "Walking wounded," the casualty requires medical attention when all higher priority patients have been evacuated, and may not require stabilization or monitoring.
Expectant: The casualty is expected not to reach higher medical support alive without compromising the treatment of higher priority patients. Care should not be abandoned, spare any remaining time and resources after Immediate and Delayed patients have been treated. Afterwards, casualties are given an evacuation priority based on need:
Urgent: evacuation is required within two hours to save life or limb.
Priority: evacuation is necessary within four hours or the casualty will deteriorate to "Urgent".
Routine: evacuate within 24 hours to complete treatment.

In a "naval combat situation", the triage officer must weigh the tactical situation with supplies on hand and the realistic capacity of the medical personnel. This process can be ever-changing, dependent upon the situation and must attempt to do the maximum good for the maximum number of casualties.

Field assessments are made by two methods: **primary survey** (used to detect & treat life-threatening injuries) and **secondary survey** (used to treat non-life threatening injuries) with the following categories:

Class I Patients who require minor treatment and can return to duty in a short period of time.
Class II Patients whose injuries require immediate life sustaining measures.
Class III Patients for whom definitive treatment can be delayed without loss of life or limb.
Class IV Patients requiring such extensive care beyond medical personnel capability and time.

YELLOW TAG
Delayed:
(observation) for those who require observation (and possible later re-triage). Their condition is stable for moment and, they are not in immediate danger of death. These victims still need hospital care and would be treated immediately under normal circumstances.

RED TAG
(**Immediate)** are used to label those who cannot survive without immediate treatment but who have a chance of survival.

GREEN TAG
Minimal:
(Wait) are reserved for the "walking wounded" Who will need medical care at some point, after more critical injuries have been treated.

BLACK T
Expectant: The casualty is expected not to reach higher medical support alive without compromising the treatment of higher priority patients. Care should not be abandoned, spare any remaining time and resources after Immediate and Delayed patients have been treated. Afterwards, casualties are given an evacuation priority based on need:

Triage outcomes

Evacuation

Simple triage identifies which people need advanced medical care. In the field, triage also sets priorities for evacuation to hospitals. In S.T.A.R.T., casualties should be evacuated as follows:

- Deceased are left where they fell, covered if necessary; note that in S.T.A.R.T. a person is not triaged "deceased" unless they are not breathing and an effort to reposition their airway has been unsuccessful.
- Immediate or Priority 1 (red) evacuation by MEDEVAC if available or ambulance as they need advanced medical care at once or within 1 hour. These people are in critical condition and would die without immediate assistance.
- Delayed or Priority 2 (yellow) can have their medical evacuation delayed until all immediate persons have been transported. These people are in stable condition but require medical assistance.
- Minor or Priority 3 (green) are not evacuated until all immediate and delayed persons have been evacuated. These will not need advanced medical care for at least several hours. Continue to re-triage in case their condition worsens. These people are able to walk, and may only require bandages and antiseptic.
- ***Cardiopulmonary resuscitation (CPR)***

Is an emergency procedure which is performed in an effort to manually preserve intact brain function until further measures are taken to restore spontaneous blood circulation and breathing in a person in cardiac arrest. It is indicated in those who are unresponsive with no breathing or abnormal breathing, for example agonal respirations. CPR involves chest compressions at least 5 cm deep and at a rate of at least 100 per minute in an effort to create artificial circulation by manually pumping blood through the heart. In addition, the rescuer may provide breaths by either exhaling into the subject's mouth or utilizing a device that pushes air into the subject's lungs. This process of externally providing ventilation is termed artificial respiration. Current recommendations place emphasis on highquality chest compressions over artificial respiration; a simplified CPR method involving chest compressions only is recommended for untrained rescuers.
CPR alone is unlikely to restart the heart; its main purpose is to restore partial flow of oxygenated blood to the brain and heart. The objective is to delay tissue death and to extend the brief window of opportunity for a successful resuscitation without permanent brain damage. Administration of an electric shock to the subject's heart, termed defibrillation, is usually needed in order to restore a viable or "perfusing" heart rhythm.
Defibrillation is only effective for certain heart rhythms, namely ventricular fibrillation or pulseless ventricular tachycardia, rather than asystole or pulseless electrical activity. CPR may

succeed in inducing a heart rhythm which may be shockable. CPR is generally continued until the subject regains return of spontaneous circulation (ROSC) or is declared dead.

Methods

Standard

A universal compression to ventilation ratio of 30:2 is recommended for adult and in children and infant if only a single rescuer is present. If at least 2 rescuers are present a ratio of 15:2 is preferred in children and infants. In newborns a rate of 3:1 is recommended unless a cardiac cause is known in which case a 15:2 ratio is
reasonable.

Compression only CPR

Compression only CPR is a technique that involves chest compressions without
artificial respiration. It is recommended as the method of choice for the untrained
rescuer or those who are not proficient as it is easier to perform and instructions are
easier to give over the phone. In adults with out-of-hospital cardiac arrest, compressiononly CPR by the lay public has a higher success rate than standard CPR. The exceptions are cases of drowning, drug overdose, and arrest in children. The method of delivering chest compressions remains the same, as does the rate (at least 100 per minute). It is hoped that the use of compression only delivery will increase the chances of the lay public delivering CPR. As per the American Heart Association, the beat of the Bee Gees' song Stayin' Alive provides an ideal amount of beats-per-minute to use for hands-only CPR. For those with non cardiac arrest and people less than 20 years of age standard CPR is superior to compression only CPR

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In pregnancy

During pregnancy when a woman is laying on her back the uterus may compress the Inferior vena cava and thus decrease venous return. It is recommended for this reason that the patient may be shifted to her left lateral position and shift the patient immediately to the labour room or OT and consider her emergency cesarean section. **:**

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