TRAUMA CARE IN GAZA - OVERVIEW

SUMMARY OF EVENTS

Since the mass demonstrations by Palestinians began in Gaza on 30th March 2018 until the 3rd May, a cumulative total of 44 people have been killed, including five children, and 6,793 people, including at least 701 children, have been injured by the response of Israeli forces, according to the Gaza Ministry of Health (MoH). From the total number of injured, approximately 59 per cent (4,003 people) have been hospitalized in Gaza at MoH hospitals and NGO hospitals, including 1,935 due to live ammunition injuries. While women, men, girls and boys have participated in the demonstrations and been affected by the violence, to date the casualty figures show that the vulnerable group most predominantly affected by the violence is male adults. Of the total casualty figures, 95 per cent are male and 5 per cent female. If the current casualty rate continues and caseload projections become reality, the number of people sustaining injuries requiring hospitalization during this crisis may grow to 10,500, equivalent to approximately 93 per cent of the total number of people injured during the 2014 hostilities (11,231 people)[1].

NEED FOR ENHANCED TRAUMA CARE

The need to enhance the organisation of trauma care services is paramount. A well- functioning trauma system delivers not only high quality pre-hospital, hospital, and rehabilitation care, but also integrates the care through effective transportation, coordination and data collection. Evidence has shown that better organisation of trauma care services can lead to reduced trauma mortality[2].

Meanwhile, trauma care must be viewed within the broader epidemiology of the health needs as the situation continues to chronically deteriorating, therefore responding to emergency trauma and non-trauma care to address all urgent needs must be considered.

CURRENT RESPONSE CAPACITY

On the 30th April, WHO established the Gaza Trauma Working Group, which includes the following actors: MoH, ICRC, MSF, PRCS (Palestinian Red Crescent Society), Medical Aid for Palestinians-UK (MAP-UK), Palestinian Children's Relief Fund (PCRF), Al Awda NGO Hospital, Union of

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[1] 21st to 28th April 2018: http://healthclusteropt.org/details/83/who-special-situation-report,-occupied-palestinian-territory,-gaza-21th-28th-april-2018 .
15th to 20 April 2018: http://www.emro.who.int/images/stories/palestine/documents/WHO-Health_Cluster-Special-SitRep-on-_Gaza-20_April.pdf?ua=1
9th to 14th April 2018: http://www.emro.who.int/images/stories/palestine/documents/WHO-Special-SitRep-on-_Gaza-13th_April.final.pdf?ua=1
6th to 8th April 2018: http://www.emro.who.int/images/stories/palestine/documents/WHO-Special-Situation-Report-on-_Gaza-6th_April_2018.pdf?ua=1
30th March 2018: http://www.emro.who.int/images/stories/palestine/documents/WHO-Special-Situation-Report-on-_Gaza-30th_March.pdf?ua=1

[2] WHO, Guidelines for essential trauma care http://www.who.int/violence_injury_prevention/publications/services/guidelines_traumacare/en/

Health Workers Committee (UHWC), Humanity and Inclusion (HI), and Turkey Doctors Worldwide. The objective of the group is to build the capacity of the trauma pathway through enhanced coordination, establish minimum standards of care, and enhance data management.
The below tables summaries the key actors and their current role in trauma pathway

Ministry of Health	• Main provider of secondary healthcare services in the Gaza. • Established 5 frontline type 1 trauma stabilisation points (TSPs) • Ambulance and transportation of patients from TSPs to hospitals and referral of casualties between hospitals • Post-operative and rehabilitation care
PRCS	• Established 5 frontline type 1 trauma stabilisation points (TSPs) • Transportation between the TSPs and hospitals
ICRC	• Deployment of specialised cell emergency medical teams • On-site emergency physician and trauma nurse rotating between the major MoH hospitals
MSF	• Post-operative and rehabilitative care at the two MSF clinics • Deployment of specialised cell emergency medical teams, primarily at Al Aqsa Hospital and Shifa Hospital
PCRF	• Deployment of specialised cell emergency medical teams for trauma and non-trauma cases
MAP-UK	• Deployment of specialised cell emergency medical teams for trauma and non-trauma cases • Capacity for deploying a specialist microbiologist
UHWC	• Volunteers deployed at MoH type 1 TSP • Provision of trauma management at Al Awda Hospital
HI	• Capacity to deploy outreach rehabilitation teams but currently funding is not available
Turkey Doctors Worldwide	• Deployment of outreach rehabilitation teams for home visits
WHO	• Coordinator of the Trauma Working Group • Provide technical support and guidance to the Ministry of Health

For an overview of the visiting specialised cell EMTs refer to the “EMTs calendar”: http://healthclusteropt.org/pages/12/emt-calender

GAP ANALYSIS OF THE TRAUMA PATHWAY

<table>
<tr><th>Level of care</th><th>Providers</th><th>Gaps</th></tr>
<tr><td>Pre-hospital care at the type 1 EMTs</td><td>MoH
PRCS</td><td>Structural gaps:
Operational and infrastructure lack resources, including medical supplies
Human resources:
Staff at the trauma stabilisation points (TSPs) are not appropriately trained in ATLS/PTC/ERTC. Need to reallocate appropriately trained staff to the TSPs
Services:
Need to standardise clinical practice across all TSPs in line with WHO type 1 EMTs. Must include: triage of casualties, resuscitation and stabilisation, stabilisation of fractures, pain management and registration and documents. In addition to clear definition on the severity of the injuries and where to refer
Role of PHCs in the management of moderate and mild trauma cases remains unclear
Documentation:
WHO trauma forms have been standardised cross MOH TSPs, but needs to be adopted by PRCS TSPs
Need to enhance analysis of documentation
Need to develop individual patient identifier that will allow the patient to be followed throughout the referral pathway</td></tr>
<tr><td>Hospital Care</td><td>MoH
Al Awda
ICRC
MSF
MAP-UK
PCRF</td><td>Structural gaps:
Operational and infrastructure lack resources, including medical supplies (including external and internal fixators), bed capacity and theatre space is limited
Human resources:
Need for specialised cell vascular surgery, which would include anaesthetic, vascular surgeon, operational theatre nurse, vascular equipment and consumables.
Need for specialised cell orthopaedics (with reconstructive profile) which would include anaesthetic, orthopaedic surgeon, reconstructive surgeon, operational theatre nurse, equipment and consumables.</td></tr>
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		Services: • Need to strengthen wound care management, including clear guidelines for use of antibiotics and management of fractures, debridement of complex extremity wounds[3] • Early discharge of patients in order to make room for the new influx of casualties is placing increased risk of post-op infections. Need to enhance in-patient capacity by referring patients to Al Wafaa Rehabilitation Society or other NGO hospitals • Need to enhance local capacity to deal with elective surgical cases as an increasing number of elective surgeries are being postponed • Upon discharge patients need clear guidance on wound care **Documentation:** • Treatment plan documents need to be provided, clear and detailed so that post-operative care can be appropriately administered • No standard reporting template for visiting EMTs
Post-op and rehabilitative care	• MoH • MSF • Turkey WW • HI	**Structural gaps:** • Operational and infrastructure lack resources, including medical supplies, is limited. MSF as the main NGO provider for post-op care is reaching full capacity **Human resources:** • Limited post-operative and rehabilitative care, some out-reach teams exist but the caseload is too high to manage. HI's outreach post-op and rehabilitation programme has not yet begun due to lack of funds • Need for deployment of multi-disciplinary rehabilitation teams; physiotherapists, occupational therapy and psychosocial counselling • Need to address other specific gaps in care, including spinal cord injuries and psychosocial needs **Services:**

[3] https://extranet.who.int/emt/sites/default/files/_A%20Field%20Guide_7.8%20MB.pdf

		• Lack of clarity on how to refer patients back to the hospital • Need to standardise WHO EMT "Minimum Technical Standards and Recommendations for Rehabilitation"[4] **Documentation:** • No central database shared across the key providers that captures patients in need of post-operative care
Transportation	• PCRS • MoH	**Ambulance:** • Requires further analysis **Other:** • Some patients are unable to afford the cost of public transport to attend post-operative/ outpatient appointments. Need to provide transportation for hardship cases

Coordination & Communication	• All
	• WHO
		• Bilateral coordination is present. "Trauma Working Group" chaired by WHO is currently the only formal forum that brings together key actors working on the trauma pathway
		• Need to develop analysis of each partner's capacity in the trauma pathway and a clear referral mechanism between partners
		• Need to establish an EMT coordination cell
		• At the field level:
		  ○ Informal communication system between TSPs and some hospitals does exist but needs to be formalised and strengthened
		  ○ Need for a dispatch centre so that TSPs know where to refer the casualty
		  ○ Limited coordination for referrals and inter-hospital transfer. There is informal criteria specifying which type of injury or the level of severity of the injury should be transferred to which hospital, but inter-hospital transfer agreement and protocols to facilitate this transfer should be strengthened
		• Clear need for dedicated resources for a call command centre

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[4] https://extranet.who.int/emt/sites/default/files/MINIMUM%20TECHNICAL%20STANDARDS.pdf