FOREWORD

1- INTRODUCTION

2- HISTORY OF VIOLENCE AGAINST MEDICAL AID OPERATIONS IN SYRIA

   2.1 Reasons for the targeting of medical care
   2.2 Unprecedented attacks against health workers
   2.3 Dramatic situation of besieged populations

3- MEDICAL NETWORKS IN BESIEGED AREAS

   3.1 Setting-up clandestine emergency care
   3.2 Limits of international humanitarian organizations
   3.3 Development of medical support activities in besieged areas

4- DEVELOPING UNDERGROUND LOGISTICS

   4.1 Analysis of logistics needs and feasibility
   4.2 Ordering systems
   4.3 Purchase procedures
   4.4 Warehouse management
   4.5 Cross-border shipments

5- THE PILLARS OF ATYPICAL LOGISTICS

   5.1 Required operational flexibility
   5.2 Risk taking vs humanitarian impact
   5.3 Operational transparency and professional rigor

6- CONCLUSIONS

1 Photo Omar Sanadiki/Reuter
FORWORD

This article attempts to put forward a different point of view on the emergency humanitarian logistics (EHL) set up during the war in Syria in order to provide medical care to besieged populations. At the time of writing, more than one million people are regrouped in certain Syria areas, mainly in the outskirts of Damascus, where they are held prisoner by military check points. These populations, who are mainly opposed to the Bashar Al-Assad regime, are regularly bombed and deprived of access to vital products such as food and drugs. Some Syrians have suffered from these barbaric practices for more than three years and are, on the whole, dying prematurely due to bombings or the lack of access to healthcare.

Humanitarian Syrian Red Crescent convoy escorted by Syrian rebels as far as Foua and Kefraya besieged areas, Idlib – February 2016 (Photo: Reuters/Ammar Abdullah).

Since the beginning of the popular uprising which started in spring 2011, doctors, nurses or rescuers who try to treat the wounded in opposition areas are submitted to systematic targeting by Governmental forces and their allies. These attacks, unprecedented in modern war history, explain why most war wounded are now treated clandestinely inside hidden health facilities supplied by underground logistics networks. Violence against medical care is still an everyday occurrence in Syria. The author will therefore avoid the discussion of certain sensitive points relating to the underground logistics adopted and will refrain from disclosing some of his information sources.

In addition, the Syrian crisis is constantly evolving and other cities such as Aleppo that are not under siege at the time of writing may be tomorrow’s affected area. Readers should feel free to correct some statements that are enclosed in this document according to the reality of what is a fast changing context.

Statements mentioned in this article only commit the author, in no case do they correspond to the vision or positioning of any humanitarian organization. They are mainly issued from personal experience related to the Syrian crisis and from the will to share it.
1- INTRODUCTION

In the space of five years, the Syrian crisis has singlehandedly undermined the credibility of all international bodies claiming to protect nations while totally ignoring all supposedly accepted humanitarian principles and the conventions derived from them.

IRIN/Patrick Gathara

In the same period, values of fraternity and solidarity advocated by some European countries were also shrugged off. At the time when it was most urgent to live up to these values and to admit on to its soil victims of the Syrian war which is one of the most serious humanitarian crises since the Second World War, Europe preferred to turn its backs on Syrians by opting for a push back policy.

At the time when it has become most critical to rethink the foundations of the UN Safety Council (UNSC) as well as the obligations of all actors engaged in the Syrian conflict, it is sadly no surprise that the World Humanitarian Summit in May 2016 completely failed to address any of the root causes of these collective failures. As long as geopolitical interests remain the primary consideration of warring parties and of states who endorse their war acts, the imperative need to protect the victims of war and those who provide aid to them will be neglected.

Without the required changes in priorities, it remains more than likely that future attempts to help the peace process in Syria will keep on failing, like the one initiated for the past five years. And this in spite of the millions of people killed, wounded or forced to flee their home or their country. This partly explains why some organizations such as Doctors Without Borders (MSF) preferred not attend to the summit. Those discussions held in Istanbul were indeed more focused on resilience and development debates rather than humanitarian responses in emergency situations.

In the face of extreme difficulties met by humanitarian organizations attempting to act independently in Syria, the fundamental principles of humanitarian action were snuffed out by actors engaged in the conflict who regularly use aid as a weapon of war. As is the case in most places affected by natural or man-made disasters, organisations wanting to provide humanitarian assistance in the country, including in opposition-held areas, have to be previously authorized by the local authorities; in this case, the Government of Syria (GoS). However, the official, authorized, humanitarian agencies have no choice regarding the recipients of their aid, nor of their actions which are piloted by the regime of Bashar Al-Assad. For those who decided to legally operate in Syria, humanitarian agencies based in Damascus must generally accept a forced collaboration with the Syrian Red Crescent (SARC) which is a governmental organization. As for “unofficial” humanitarian organizations who try to provide assistance to populations considered as terrorists by the Syrian government, their only choice is to deal with activist networks and opposition groups if they want to reach the victims most seriously affected by this conflict.

Whether for reasons of continuing obstruction of aid in Syria or because of the persisting climate of high insecurity in the country, the problem of access to the victims of the conflict – mostly those who are trapped in besieged zones – represents de facto the main challenge of this crisis; a challenge which cannot be overcome without humanitarian logistics adapted to these types of constraint.

This article puts forwards an analysis of EHL set up in Syria to circumvent military siege blocking lines, in spite of the huge risks incurred daily by logistics actors. Through underground supply networks, several tons of drugs, food and other essential products are shipped every day to alleviate the suffering of populations considered by some as ‘terrorists’ or by others as ‘hard to reach’.

Before considering the conditions required for the organization of this very atypical type of logistics setup (as well as the issues and limits inherent to these types of clandestine operation), the author first returns to the issue of the idiosyncrasies of the Syrian context as well as the various methods adopted to assist the victims of this dreadful war.
2- HISTORY OF VIOLENCES AGAINST MEDICAL CARE IN SYRIA

The popular protest movement which began in Syria in spring 2013 has transformed, in a few years, into one of the deadliest conflicts ever experienced in the Middle East. Although over the last five years, the Syrian crisis, and the forms of violence used, has evolved and changed, the violence brought to bear by GoS against providers of medical care been a constant, remaining relatively unchanged since the beginning of the uprising.

2.1- Reasons for the targeting of medical care

In March 2011, when the first anti-government movements were launched from Deera in southern Syria, attacks by Bachar Al Assad’s military forces and private militias were immediately directed at the medical teams trying to rescue the victims of the regime’s bloody repression of the demonstrators. Many doctors and first aid workers suspected of treating injured demonstrators were arrested, tortured or executed and their families threatened. Some hospitals, such as in Saqba and Qudssaya, both in the outskirts of Damascus, as well as many other healthcare structures that admitted the injured, were ransacked or burned. Attacks against medical care led to a massive exodus of doctors and surgeons from Syria and were a very clear part of the repression strategies used by the GoS. Targeted attacks against health workers and medical facilities were primarily aiming at sweeping away an anti-governmental movement that quickly took on national proportions. GoS forces systematically surrounded all demonstrating crowds firstly with a view to isolating protesting groups from each other and subsequently breaking up the protest groups. This isolation strategy was very quickly coupled with the deliberate targeting of doctors and journalists, in order to ensure that no written record or testimony of the atrocities committed by governmental forces and militias got out.

When the coordinating committees of the local demonstrations finally decided to take up arms to protect demonstrators against the massacres perpetrated in some cities, such as Hamas in July 2011 or Houla in May 2012, the previously peaceful protest movement turned into an armed revolt and then into a full-blown civil war. As in Damascus’s eastern suburbs and in the northern area of Homs, some protest sites were soon besieged by government forces who established a permanent blockade to prevent any medical supplies from entering these areas. Intensive bombings – including the use of chemical weapons as in August 2013 in the Damascus suburb of Moadamyе – were targeted to batter heavily populated areas including public facilities, notably hospitals. In spite of the magnitude of the disaster and of the lack of medical resources to face it, military blockades and snipers located around bombed areas prevented any evacuation of the injured or the sick.

The continued violence by government forces and its allies against any medical care organized outside the control of the Damascus authorities evolved according to various objectives, but was consistent in its ferocious brutality. It seems clear that the reasons for this violence are mainly based on three expected results:

2 Anwar Amro/AFP/Getty Images –

3 see also Amnesty International report – The Syrian government targets the wounded and the medical staff - 2011

4 Up to 800 demonstrations were organized on the same day in the whole country

5 Telephone networks and internet were generally cut during demonstration days

6 Sarin attacks were recorded in the morning of August 21, 2013 in some areas controlled by Ghouta opposition in Damascus outskirts, causing the death of several hundred people
• To punish Syrian populations who display their refusal to submit to Bashar Al Assad’s authority by denying access to essential care;
• To weaken opposition armed groups and to slow down their progress by affecting their capacity to treat war-wounded;
• To remove of the possibility of medical acknowledgment of the number of injured and deaths recorded in healthcare structures, in order to be able to perpetrate large-scale crimes with complete impunity.

Besieged Derayya areas, South Damascus outskirts
(Photo: Fadi Dirani/AFP/Getty Images)

This violence may also emanate from the mafia-like dynamics that have characterized Assad’s clan and its paramilitary and security repression bodies (Shabiha and Muhabalat services) for the last four decades. Whenever permits are requested to set detained doctors free, to evacuate wounded and sick patients, or to bring drugs into besieged areas, they are either simply refused or they are sold to the highest bidder by fundamentally corrupt regime-related bodies.

In openly displayed disregard of Geneva Conventions on the protection of health workers and patients, these various forms of violence (bombardments, killing, arrests, tortures, etc.) are perpetrated according to a methodical and systematic movement of repression, always with extreme brutality.

2.2 Unprecedented attacks against health workers

The military objectives of warring parties have evolved significantly over the last few years and are now far removed from the initial claims expressed in the 2011 uprising. Five years after the first demonstrations, neither the Assad regime and its allies, nor the opposition forces and even less those from the Islamic State (IS) can pretend being the representative of the Syrian civil society. This absence of legitimacy towards the first victims of the conflict can explain why the level of violence against medical care provided to populations has not changed during the last years of war.

Because medical teams suspected of providing treatment to alleged “terrorist” populations are deemed to be legitimate target by the GoS, the number of hospitals bombed in Syria remains unprecedented since WWII. Some targeted hospitals – such as the one in Ma’arat Al-Numan bombed in February 2016 – are submitted to “double tap” attacks aimed at causing as many casualties as possible. After a first series of rockets is fired on a village or a heavy populated urban area (schools, markets, mosques, etc.), a second attack is then launched on the nearest medical structure once the ambulances have arrived, loaded with the wounded. Aerial tracking is done by fighter jets and drones to track the movement of ambulances who transport the wounded from the first attack in order to identify the nearest health facility and to then conduct a second attack against it.

Other double tap attacks with a second missile launched at exactly the same target just a few minutes after the first attack are aimed at causing as much damage as possible to those who try to bring relief and to rescue victims.

---

7 See Amnesty International video - https://www.youtube.com/watch?v=3rsfh1kAOLk
8 Anti-terrorism Act voted on July 2, 2012 by the Syrian government who criminalizes any non-official medical aid pursuing to bring relief to opposition populations
9 Double tap attacks are practices used in Syria since 2011, first through double explosion bombings with reduced interval to besieged cars (e.g. Damascus December 23, 2011) then, over time, through air attacks with extended intervals.
In 2015, MSF registered more than 90 bombs against healthcare structures receiving its support, killing or injuring almost 80 staff members performing their duties. Between March 2011 and February 2016, the organization Physicians for Human Rights (PHR) has recorded more than 720 healthcare workers killed, and declared 2015 as the worst year to date in terms of attacks on hospitals in Syria. The number of logisticians who were arrested or killed while purchasing, storing or transporting medical supplies for clandestine healthcare structures is more difficult to assess. Nevertheless, from January to April 2015, incident reports recorded by some medical networks in besieged areas stated that for every one member of medical staff killed, twice as many logisticians died. When they are not arrested by pro-governmental forces, persons who illegally transport medical supplies are commonly shot by sniper fire or killed by mine explosions when crossing siege borderlines.

Since 2013, the use of siege strategies has increased. In 2016, nearly one and a half million Syrians have been recorded as trapped in besieged zones. The number of besieged people in Syria – already out of proportion compared to other sieges like in Sarajevo during the Bosnian conflict – is likely to increase specifically in view of the likely encirclement of the city of Aleppo. The severity of these sieges drastically increased during this period, with greater restrictions imposed at check-points on the movement of goods and people. Stopping the concealed movement of medical supplies into besieged zones is one of the main reasons for these increased restrictions. During the period of pseudo cessation of hostilities negotiated by the Americans and Russians in February 2016, the International Syrian Support Group (ISSG) agreed to allow humanitarian convoys organized under SARC, UN and ICRC auspices from Damascus to reach populations under siege. Besieged zones considered too ‘critical’ by the Syrian government were excluded from this agreement however and some drugs were – and are still today – not authorized to pass. Other medical supplies usually related to surgery, reproductive health or malnutrition – were unloaded from trucks by Bashar Al Assad’s security services before being allowed to enter inside besieged areas. Under those conditions, the adequate distribution of the supplies to those in need is therefore extremely doubtful.

Furthermore, during this short cease-fire, the bombings of health facilities were maintained, most notably striking two hospitals and one school in Eastern Ghouta. During the attack, 38 people were killed and 67 injured. Most were civilians including five health workers. From a general perspective, during the very short and rare cease-fires in Syria, the provision of medical care remains just as dangerous for those providing care...
to war victims. In April 2016, Dr Khous, the last doctor active in the besieged area of Zabadani, close to the Lebanon border, was killed by a sniper’s bullet in the head while he left the hospital after having operated a patient’s leg wounded by another sniper shot. A few weeks later, Dr Moaz – one of the last doctors in the Aleppo area – died in a bombing while he was on medical duty, as did six other health workers in Al-Quds hospital.

Medical evacuations are systematically refused for besieged zones, even during periods of starvation, like the one still prevailing in the Madaya area besieged by the GoS and its allies since July 2015. The only possible evacuations are those negotiated with armed opposition groups during the exchange of prisoners, or after ransom payment paid to besiegers.

The determination of the GoS to erase all tracks of its crimes remains as intense as during the uprising period. One of the consequences of this is that hospitals located in besieged zones are under threat of being bombed by the Syrian army simply for recording injured and malnutrition cases in their facilities. Hence, violence against a large proportion of the Syrian population is being perpetrated behind closed doors, with complete impunity away from the eyes of the outside world.

2.3 The dramatic situation of besieged populations

Main Damascus region besieged areas – January 2015

The use of military sieges against populations opposed to Assad’s authority was initiated at the very beginning of the national protest, as occurred in March 2011 in Deraa, South Syria. But only after 2012 did this tactic become a real weapon of war with more visible and more sustained devastating effects on besieged populations. The practice of whole population entrapment was first used by the Syrian army and its allies. It was later adopted by opposition groups as well as by IS forces albeit on a smaller scale with less intensity and to a lesser extent. While military siege strategies are in line with Geneva war laws and conventions, the related punitive actions taken against besieged civil populations are not authorized by international legal fora. Any systematic deprivation of care, food and movement of non-combatants is a clear violation of international humanitarian rights.

In early 2016, under strong political pressure, the United Nations reported slightly less than 400,000 victims of sieges imposed by various military forces fighting in Syria. Those figures – largely underestimated – were still used as reference by the Security Council although, at that time, estimations from aid agencies active in besieged areas were three to four times higher.
The combined effects of (i) a gradual depletion of medical resources, and (ii) the impossibility of organizing the medical evacuation of even the most critical patients, go a long way to explaining why this lack of access to essential care remains the main cause of mortality in besieged areas. Even in periods of heavy bombardments and peak of malnutrition, besieged populations keep on dying mainly due to acute or chronic disease. In the most populated besieged areas of Syria that are located in the outskirts of Damascus, thousands of people are dying each year because they have no means of reaching quality medical facilities which are often located just a few minutes away from their home, on the other side of impassable checkpoints.

These asphyxiation strategies, imposed on whole populations that have been labeled as ‘terrorists’, include retaliation measures such as the intensive bombardment of public spaces in besieged areas (markets, schools, mosques, hospitals, etc.). Between January and December of 2015, a number of hospitals operating in besieged areas of Damascus outskirts and Homs northern region, have reported among their bombardments-related death records, 30% to 40% of women and children killed by bombs. During heavy bombardment periods this amount could reach 80%, as happened in a playground attack in Al Waer (East Homs outskirts) by fighter jet in September 2015.

These bombing campaigns are usually carried out as reprisals against besieged populations after strategic territories are conquered by opposition forces. Following the conquest of some areas in Idlib and in Deraa provinces by the coalition of opposition forces in May 2015, the besieged areas in East Ghouta were massively bombed. For 21 consecutive days, repeated air attacks killed more than 400 people and injured 4,200. Other retaliation strategies include starvation strategies, as happened in Madaya from the end of year 2015 onwards. Cases of starvation recorded in Syria are generally caused by the imposition of severe sieges on small areas, where the flow of supplies (including food) is more easily controlled. Situations of acute malnutrition are in many cases also related to the rapid overpopulation of a besieged area. This geographical saturation is caused by the forced displacement of families suspected of being affiliated with opposition fighters, as occurred in Moadamayé in October 2013, in Yarmouk Palestinian refugee camp at the beginning of 2014, and in Madaya at the end of 2015.

Yet another form of punitive and retaliatory action imposed on thousands of people, some of them besieged for more than three years, is the regular use of explosive barrel bombs. These indiscriminate bombardments dropped from high altitude helicopters aim to (i) maintain a permanent climate of terror among whole populations; and at (ii) weaken the population’s mental resilience. The large scale and protracted ‘asphyxia’ of these populations is unavoidably affecting their sense of solidarity and mutual support. This can explain the rising tensions observed since 2015 between some besieged communities and groups and the rampant corruption noticed more recently as well. These are very far from the dynamics that prevailed at the beginning of the Syrian revolution.

3- MEDICAL NETWORKS IN BESIEGED AREAS

3.1 Setting up clandestine emergency care

The scale and intensity of the violence against medical care in Syria explain why, as early as the beginning of the demonstrations, medical associations decided to work together to set-up mobile medical teams and underground supply networks in order to operate in hidden health structures. Clandestine networks of doctors mainly acting in large-size cities such as Damascus, Hama or Homs, relied on remote support proposed by some international medical organizations. Every day, hundreds of surgery kits and first aid equipment were sent to demonstration areas to enable networks of doctors to organize clandestine emergency care. War surgery training sessions were also organized in neighboring countries to upgrade the skills of medical teams who were not very experienced in conflict injuries.

At first, emergency treatments were provided in “medical points” set-up in bathrooms, basements or other hidden rooms. These medical points would accommodate medical teams who arrived the day before demonstrations which were generally on Fridays15. In the face of increased levels of violence during demonstrations and the use of heavy weapons on the crowd, the number of victims rapidly increased, saturating and exposing these inadequate medical points. To cope with the massive influx of injured, hospitals were improvised, generally in mosques16 or in basements of disused buildings, to avoid jeopardizing the security of building inhabitants.

In 2012, military siege strategies became more and more prevalent along with greater and greater restrictions on the movement of individuals and goods, mainly in the outskirts of Damascus. More and more underground transportation networks were formed to attempt to bypass military checkpoints and to ensure the continuing provision of supplies to the medical teams trapped in these areas. To address these siege situations, the scale and severity of which had rarely been seen before in a conflict, underground medical networks took on new dimensions as the medical support and logistics approaches adapted to these new and extreme sets of circumstances.

In July 2012, by voting in an anti-terrorist law intended to criminalize any medical care provided to members of the Syrian opposition, the GoS decided to impose severe control on humanitarian medical structures in general and on medical care in particular. During that period, public and private medical structures received instructions from the authorities in Damascus prohibiting them from treating displaced families flowing from areas retaken by the Syrian army. Many doctors, although personally opposed to the insurrection movement, risked their lives by deciding to disobey these discriminatory injunctions and to treat clandestinely whole families who were excluded from healthcare.

As the Free Syrian Army (FSA) conquered territories in the North and South of Syria, so called “liberated” health structures were set up in opposition areas. Many hospitals, clinics, maternity units and health posts were set up and ran using cross-border supply chains organized from neighbouring countries. Considered as illegal by the authorities in Damascus, the largest healthcare structures such as hospitals and maternity units were set up covertly. These health facilities – some of them set up in caves – have no obvious distinctive signs in order to avoid being targeted by repeated explosive barrels dropped from Syrian army helicopters.

Medical structures in FSA controlled areas were sometimes set up under pressure from multitudes of katibas (rebel garrisons) who considered these healthcare structures as a tool to establish their power. A hospital

---

15 As in Latakia from March to April 2011, some spontaneous demonstrations were organized not every Friday but during several consecutive weeks before being cracked down by Assad forces and private militias
16 The first improvised hospital was established inside a Deraa mosque before being stormed a few weeks later by Assad forces
operating in a war zone is one of the largest sources of employment in an area and, for an armed group, is a symbol of its ability to provide care for a population in the government’s stead. From the end of 2012, the military power of the FSA started to become radicalized. With the rising power of jihadist movements, some groups were pushing to transform ‘revolutionary’ hospitals into Islamic ones, imposing healthcare structures and adopting management modes that were compatible with their vision of Sharia (dressing code for female staff, gender segregation in the hospital wards, protocols for birth/death certificates, for medico-legal investigations, etc.). In 2013, with the gradual seizure of power by ISIS forces in some areas of Northern Syria, the medical reality on the ground changed again. The creation of their Islamic State was based on a single administration (no legal responsibilities shared with other military groups) as well as a repressive and brutal application of Sharia against medical teams, which in some cases lead to the murder and/or abduction of certain healthcare staff members.

### 3.2 Limits of international humanitarian organizations

Restrictions imposed by the Syrian government on the provision of medical care to populations opposed to its authority mainly concern international humanitarian organizations working from Damascus. In spite of resolutions unanimously voted in 2014 by the Security Council on humanitarian access to besieged areas, the Assad government continues to prohibit these areas to humanitarian agencies by invoking two main reasons:

- Humanitarian assistance, more specifically medical care, is serving the interests of ‘terrorist’ fighters;
- Aid workers could face security risks by entering in a besieged area.

As a result, distributions of relief items delivered from Damascus are usually negotiated during the well-known ‘Reconciliation Committees’ that are organised by Assad’s security services with local representatives of a besieged area. Although Damascus-based international aid agencies are the main suppliers of these relief goods, they are not invited to these committee meetings. This allows the Assad regime to use these relief items (which besieged populations desperately need) as a bargaining chip to attempt to retake control of besieged populations.

In the absence of any international agency presence during the distribution of aid, relief items sent to GoS controlled areas are allocated in a discriminatory fashion to recipients based on alleged political affiliation. Faced with the systematic obstruction by the GoS of the provision of any form of medical assistance to the people with a genuine need for healthcare, practically all international organizations based in Damascus have thrown in the towel. They understandably prefer to direct their aid to other types of programmes, generally involving the water supply, sanitation, education and/or agriculture.

In short, the various deterrent measures used by the GoS are the reason why, for more than four years now, active healthcare structures in besieged areas have only been able to count on medical support supplied clandestinely by non-official humanitarian organizations. Even during the organization of inter-agency convoys negotiated during the cessation of hostilities in February 2016, restrictions against medical care and discriminatory distribution of relief items through the SARC persisted. The few medical donations authorized

---

17 In 2013, some UN representatives admitted controlling only 6 to 7% final allocation of relief items
during that period were set up without concertation with organizations active in besieged areas. Some drugs were also offloaded from trucks by besiegers at military check-points, to be sold afterwards at exorbitant prices inside besieged areas. In some cases, these restrictions are applied to other vital goods such as food. In the Darayya area, south of Damascus, besieged since 2012, the population got a nasty surprise in June 2016, when they found that the first inter-agency convoy contained shampoo and mosquito nets, but no food.

This large scale diversion of humanitarian aid perpetrated by the GoS massively reduced the impact of these convoys on besieged population mortality. The besieged population of Madaya has continued to die of starvation despite several humanitarian convoys which were sent there from Damascus between October 2015 and January 2016.

As a result of cumulative frustrations generated by the persistent obstruction of international aid by the Damascus authorities, some governments have started to consider some unorthodox forms of intervention. Airdrop operations were suggested between January and May 2016 in spite of risks usually associated with this type of practice when there is no ground control (military-humanitarian confusion, tensions in drop zones, uncontrolled distribution of items dropped, etc.)

Medical aid brought to Syria by humanitarian agencies through cross-border operations, mainly from Turkey, is also limited in many respects. Firstly because few aid organizations are able to propose healthcare services in acute crisis situations – especially when it comes to providing war surgery. As a result, most INGOs have been forced to develop proxy-interventions in Syria by operating only with Syrian staff in existing healthcare structures, or by sub-contracting medical care to local NGOs or other organizations found amongst the Syrian diaspora. The unique difficulties presented by the Syrian situation have meant that many of these international agencies have been used systematically as a financing bridge between institutional donors and local NGOs. Unfortunately, many of these agencies have seen their budgets growing exponentially as a result without having the logistic capacity to cope with the financial growth. As a result, some INGOs have been exposed to large-scale frauds.

The scarce few international organizations able to offer independent healthcare services in opposition areas as of June 2012 were obliged to drastically reduce their presence in Syria two years later. Events such as the series of kidnappings recorded in northern Syria around that time and the staged beheading by ISIS of some humanitarian workers and journalists, not to mention the escalation of bombardments, were the root causes of this humanitarian withdrawal. Faced with the unprecedented volatility of armed groups and the fragmentation of their chains of command, humanitarian organizations had no other choice than to limit their presence in northern Syria and to focus on remote support, whether material, financial or technical. As regards the aid agencies active in besieged zones, most of them managed to adapt to the new reality of underground intervention by reducing the bureaucratic and financial burdens generally generated by institutional donors. These agencies also had to resist to the pressure imposed by their banks due to increasing anti-terrorism laws in their country.

With few exceptions, Syrian context polarization combined with Bachar Al-Assad regime intransigence don’t allow aid agencies to both operate in areas controlled by the Assad regime and work in areas besieged by the GoS. These restrictions are even more important for humanitarian agencies mandated by members States. Due to their respective mandate, the ICRC and United Nations agencies can hardly go against the will of a sovereign State and develop clandestine humanitarian operations.

---

20 https://www.irinnews.org/newturkey-syria-aid-corruption-deepens
This polarization of humanitarian aid in Syria still continues to-day to create sharp tensions within the humanitarian community. International agencies operating from Damascus are accused of passive collaboration with the Syrian regime and of supplying most of their assistance to populations favorable or submitted to Assad authority which humanitarian needs are far from being the most blatant. Damascus-based UN agencies are the first targets of criticism. Between 2012 and 2015, those agencies have been reported signing prohibitive procurement contracts – around $ 4 billion worth in total - with suppliers closed to the regime, including many that fall under US and European Union sanctions. These criticisms are exacerbated due to limited transparency and a lack of denunciation by Damascus-based aid agencies of the GoS’s manipulation and large scale diversion of their aid.

As far as international organizations operating in opposition areas are concerned, they are accused of massively subcontracting aid to local humanitarian organizations or diaspora. Based on often unscrupulous partnerships, a large number is claiming authorship of these relief projects and pretend to be hyperactive in Syria in order to collect more funds. By refusing to support local NGOs other than through international NGOs, institutional fund donors established a very heavy and extremely random funding chain on which Syrian humanitarian organizations working in opposition area cannot rely. Unfortunately, the lack of reliability of funding mechanisms urged some of these organizations to make a choice between defrauding or relying on more stable funds coming from major opposition groups.

On the other hand, international organizations active in besieged areas are suspected to fuel either the interests of corrupted networks of Assad clan who control some underground markets, or those of opposition armed groups who control access to some of these areas.

---

21 In 2015, 81% of the UN budget for Syria – $1.1 billion in total – have been allocated through the channel of the Syrian government GoS while some studies estimate that more than 80% of war victims and more than 90% of destroyed care structures are located in opposition areas http://www.bmj.com/content/351/bmj.h4736.long
22 International and local/diaspora actors in Syrian Crisis, a diverging set of systems – HPG March 2015
3.3- Development of medical support activities in besieged areas

In traditional typology of international humanitarian operations, we can identify two main operating modes:

- **Programmes of direct assistance** to victims of humanitarian crises. By managing this type of programmes, the humanitarian organization is engaging its legal and moral responsibility in aid provision. According to security context, the control of these programmes can be done from a decentralized decision-making center (also called “Remote Control programmes”);

- **Support programmes**, usually supplied by United Nation agencies or institutional fund donors to ‘partners’ in charge of the humanitarian response. Humanitarian support may take several forms: punctual or regular, material or financial, even technical (advice, training, documentation, etc.) Contrary to direct interventions, organizations who propose support programme don’t engage their legal or moral responsibility on supported programme quality.

Set-up of medical support programme is generally defined by donations of medical equipment and drugs, including specialized food products (therapeutic and supplementary). It is also accompanied by HR support such as: salary for health workers, medical training and technical advices to supported medical teams, etc..

Over time, healthcare structure support in Syria expended to other activities such as protection of healthcare facilities or underground medical evacuations.

Given strong access restrictions imposed to humanitarian organizations, the hospitals, clinics, maternities, ambulance services managed by Syrian medical teams are on the front line of medical response to besieged areas conflict victims. Although considered as legitimate target by the GoS, these underground medical activities are providing essential care to thousands of people every day. Emergency care in addition to treatment for more chronical diseases and child birth services are offered in extremely precarious conditions thanks to the determination of health workers still active in these areas.

Medical supplies delivered to these illegal health facilities are organized via activist networks who generally negotiate access with most influential opposition armed groups. Regarding crossline operations organized by the SARC/UN convoys, five years after the beginning of the conflict they are still too random and too limited to allow besieged areas hospitals to count on them.

Since the beginning of the conflict, the availability of adequate resources to allow qualified medical teams to provide care to victims of violence in areas prohibited to aid agencies is the key principle of support activities. This trust relationship established between doctors – those prisoners inside and those blocked outside – strengthened over years through regular exchanges on social networks and other internet applications. This doctor-to-doctor communication is usually exchanged at night, while medical activities are less intense and bandwidths less saturated. It is the time when needs from healthcare structures are expressed, medical orders adjusted, and advices on shared complicated patient cases given. These night exchanges also allow to share distress moments when a doctor is exhausted after relentless operations or when humanitarian situation becomes morally or physically too heavy to be supported.

Emergency Room, Dar Al-Shifa hospital – Aleppo October 2012 (Photo, Nicolas Hammastrom)

Overtime, supply of medical equipment and drugs to these doctors significantly improved. Choice of access roads, storage strategies or order procedures consolidated according to hyper-volatile and hostile supply setting.

Due to growing volume of medical donations daily involved in besieged areas, operating principles and standard procedures (SOP) specific to support programmes were developed with beneficiary healthcare structures after 2013. This framework was primarily aiming at structuring and making more sustainable and effective underground logistics networks that so far were built spontaneously. Data management tools and information systems – mainly concerning donation tracking – were progressively adapted to guaranty
maximum accountability and transparency in risky supply operations that raised multiple suspicions and critics from other international humanitarian actors. Above all it was necessary to make sure that the equipment sent to besieged areas reached the destination, before making sure of its good usage once orders are delivered on the spot. In a few years, underground logistics networks intending to deliver medical aid in besieged areas will be one of the most sophisticated humanitarian supply chain ever created in the context of humanitarian crisis.

Overtime, support programmes, initially guided by logistics constraints to meet access challenges, will take on a more medical dimension to improve healthcare given each month to several hundreds of thousands people. Then, these programmes also served as a sounding board to document and testify about suffering and terrible humanitarian situations experienced by most heavily affected victims of the Syrian conflict remaining cut from outside eyes. In August 2013, for the first time, medical reports from healthcare structures active in besieged areas were used as public testimony regarding cases of mortality and injured from chemical attacks recorded in Ghouta, Damascus outskirts. Two years later MSF, based on its support activities, documented the unprecedented number of attacks on healthcare structures supported by the organization mainly in besieged areas as well as on civilians who were the main bomb victims.

4- UNDERGROUND LOGISTICS IMPLEMENTATION

4.1 Analysis of needs and of logistics feasibility

Because there was a growing number of support requests observed from 2012, operating principles and admission criteria were established by some organizations already active in medical support programmes in Syria. These principles and criteria are regularly updated according to medical needs, the reality of the Syrian context and the dynamics of remote support programmes: no intermediary in the doctor-to-doctor relationship, integrity and impartiality of the supported activities, free care, etc.

The identification and assessment of healthcare structures and their needs plays, in this context, a key role to ensure compliance with principles and, when appropriate, to maintain or suspend support granted to a medical structure. Further to these preliminary assessments, logistics feasibility analysis (transportability, negotiation for road access, checkpoints, etc.) are conducted in each besieged pocket where supported health structures are located.

Logistics procedures and tools that will be developed later will ensure that equipment sent to health structures match needs expressed by doctors (type of required item, expected quantity/quality) and above all to make sure it will reach the required place and time of delivery at destination.

4.2 Ordering Systems

One of the major challenges was to manage to build an “end-to-end” supply chain in collaboration with medical teams and hospital managers who – before the Syrian conflict – had never operated in acute humanitarian crisis. In addition with precarious installations24, supported medical facilities were facing frequent lack of drugs and emergency equipment stock out during mass influxes of injured. Logically, at the beginning of support activities, the order system was based on standard lists of emergency kits easy to send and simple to use.

Only when it became obvious that siege strategies would last much longer, depriving whole regions of access to essential drugs over a long time, then these order lists, initially very basic, were extended. A more expanded selection of medical products supplied according to a pull dynamic allowed medical teams to order specific items according to their needs, in addition to existing kits. In parallel to emergency care provided to wounded, this pull dynamic of the ordering system was aiming to give doctors the capacity to also treat chronic and acute diseases, to provide delivery services and therapeutic support to thousands people traumatized by Syria’s war violence.

24 The first improvised hospitals, such as in Deraa mosque in March 2011, were very basic, with patients lying on the floor with blankets and tinkered perfusion systems.
The ordering process was also extremely simplified to allow supported medical teams to place orders, generally at night via internet networks, without facing heavy administrative system. It was also needed to codify order systems and monitoring tools in order to mitigate the risk of identification of medical structures which, since 2012, were considered as legitimate targets. Codification of items from order list and of supported healthcare structures sped up the need to harmonize data management for the various support projects.

**End-to-End supply chain in besieged areas**

Based on preliminary needs expressed by recipient structures to the support organization, a more formal external request document is established and integrated in the order validation/rejection process of the order. To improve the performances of logistics data processing that can be sometimes heavy, some support organizations have developed an integrated ERP-type software package. Although the implementation of this type of software is complicated to develop in a context like Syria, it can however facilitate the ordering management linked to stock status and ongoing shipments. Today, most of the preliminary requests are defined through ‘Request Packages’ where medical, logistics or HR needs are combined in one same table.

With time, support level agreements (SLA) from six to twelve months were developed by humanitarian agencies with some hospitals regularly supported over the past several years. These SLA give them the possibility to count on more flexible material and financial support and to secure over time resources needed by the organization of their hospital services. Some organizations are regrouping the preliminary request into a more global package request that includes medical items, non-medical items and HR incentives.

---

25 Some support agencies with medical activities in besieged areas proceed up to 900 order lines per year, i.e. more than 2,000 ordered items each month.
4.3 Purchasing procedures

From 2012 onwards, at the time of territorial overflow of Damascus authorities by armed opposition, support activities to health structures began to be settled through cross-border logistics operations. The vast majority of aid agencies were then forced to operate from outside Syria, relied on international procurement process of emergency equipment afterwards sent to Syria.

Due to the gradual closing of Syrian borders with Lebanon and Jordan after 2013, and two years later with Turkey, support organisations had to change their procurement strategies for relief items. To adapt to this constraint, some aid agencies have decided to reduce international purchase and developed more capacity for local purchase. Although the implementation is more complicated, the change of direction related to procurement strategies enabled on one hand to reduce risks associated to medical supplies transportation with shorter distance and, on the other hand to increase the reactivity (see next paragraph).

After mid-2013, supplying some besieged pockets could no longer be organized without local purchases of drugs and medical equipment. At the same period some international organizations gave up support activities to these areas, since their purchasing procedures could no longer meet their financial donors’ requirements. Indeed, compliance with traditional purchasing procedures (tenders, preliminary quote requests, supplier selection, etc.) is not realistic in Syria’s war context. Agencies with more autonomous financial backbone that wanted to maintain support activities in besieged zones no longer accessible through cross-border operations had to develop new procurement models.

To keep up supplying besieged areas not accessible by cross-border ways, organizations engaged in support to health structures active in these areas had to developed new sourcing mechanisms. Some of them decided to integrate Syrian pharmaceutical experts in their support teams in order to guaranty the availability of local drug markets (quality, quantity, and price) as well as their reliability in hyper volatile context.

To be efficient, the monitoring system of parallel pharmaceutic markets must also include control mechanisms through reconciliation work carried out by purchaser and procurement officers. Without reliable invoicing system, which sometime does not exist anymore\(^{26}\), it is necessary to make sure goods that have been purchased have effectively been delivered to the beneficiary health facilities at the right quantity, the right quality and the right time\(^{27}\). The other major constraint is indeed linked to the consolidation of financial transactions intended to pay suppliers through informal value transfer systems (Hawala), in spite of bank restrictions and counter-terrorism pressure measurements.

In front of growing risks of goods interception by governmental forces during their transportation up to besieged areas, more and more suppliers propose higher purchase prices including access security, sometimes via corrupted networks related to Assad clans. This is why the choice of drug purchases inside Syria includes many ethical questions that must be permanently considered before accepting this last resort solution.

It is interesting to note that the main institutional donors took several years before lifting the burden of their administrative procedures – including purchase – imposed to their humanitarian partners present in Syria, to allow them to be active in besieged areas\(^{28}\).

---

\(^{26}\) For obvious security reasons, many suppliers refuse to issue purchase invoices

\(^{27}\) Some medical products purchased in Syria are sent outside the country by support organisations quality control, others are monitored through batch numbers

\(^{28}\) It is only from June 2014 that first INGOs operating through institutional funds were active in besieged zones
4.4 Warehouse Management

Progressive closure of main entry points at Syrian borders had major impact on purchase strategies as well as on warehousing of relief items bound to active hospitals in besieged areas. At the beginning, medical donations were taken away by logistics departments of medical networks from humanitarian organization warehouses based in neighboring countries. Since the beginning of 2013, humanitarian cross-border operations are rendered more difficult and more dangerous to organize. Due to saturation of neighboring countries – mainly in Lebanon and Jordan – as well as growing tensions with refugees, borders are gradually closing and cross-border movements organized by medical networks represent high risks for transporters.

In order to consolidate the increasing volume of supplies, central stocks allocated to support activities were progressively moved inside Syria, mainly from Turkey, in spite of replenishment constraints and risks of bombardment or looting. However, this stock deployment inside Syria – including advanced depots located close to or inside besieged areas – enables more flexibility in medical goods movement. Due to these clandestine humanitarian depots, generally separated from military storages, support activities gained enormously in reactivity. These advanced depots also facilitated the set-up of security stocks that can be used in case of tension inside besieged area or when purchase prices on reselling markets become too high. The use of these stockpiles also gives to support agencies the possibility to offset the price variation of parallel markets in case of sudden increase. The use of food stocks during high inflation period is forcing suppliers to set again more affordable purchase prices.

Since mid-2015, a new constraint occurred concerning clandestine warehouse security – mainly for food stocks in besieged areas before their dispatch to distribution points. During some siege extreme severity peaks, part of starving population looted some warehouses or threatened food distribution points.

4.5 Cross-border Shipments

For safety reasons, medical material of humanitarian organizations is usually organized by logistics departments of medical networks. In regards to dangers related to clandestine drug transportation, access roads to besieged areas are permanently redefined according to military checkpoints, as well as opportunities to cross both borders and front lines. Many logisticians are arrested or are killed during transportation of medical supplies into besieged zones. When they are not jailed, people who are smuggling medical supplies are frequently killed by snipers or mines located in these areas outskirts. A large number died from torture imposed by regime jails, including Sedanya notorious prison in mountains overhanging Damascus city.

Further to dangers related to GoS and its allied forces repression, the other major risk of shipments in besieged areas is the possible stealing or requisition by opposition armed groups during the shipping to beneficiary hospitals. Whereas medical supplies are not really targeted by robbery or military requisitions, sensitive products (diesel for hospital generators, money for staff salary, etc.) are more frequently exposed to attempted theft. Since the beginning of the conflict, galloping inflation associated to strong Syrian Pound depreciation impose more vulnerability to this type of transportation.

29 Some relief items are also taken away from suppliers’ warehouses
30 It is difficult to assess the total tonnage of medical shipments sent each day in besieged zones, but it remains very substantial. To the extent that, in April 2016, GoS declared that all humanitarian product imports would be criminal
31 In May 2016, Syrian Human Right Organization (SOHR) alerted on the fact that at least 60,000 people died in GoS prisons, including more than one third in Sednaya jail
32 Estimated at 90% in 2013 by the World Bank, inflation would be 14% in 2014 and 30% in 2015
Considering multiple risks of interruption, diversion and requisition during transportation, humanitarian products shipment in besieged areas include two major challenges:

- the ability to track goods all along their transportation up to reaching destination and its acknowledgement of receipt;
- the ability to provide negotiation leverage in order to force material restitution in case of interception during transportation or robbery from some hospital staff.

Obviously, these leverages are practically nonexistent with regard to restitution of equipment detained by government forces, their private militias or their security agents. However, they are much more efficient in case of requisition by opposition armed groups or robbery. There are several means to put pressure for equipment restitution. The most efficient and most legitimate one is the suspension of support activities up to restitution of intercepted/stolen equipment in spite of induced risks of treatment interruption. In order to reach a substantial weight in the negotiations to get back their goods, humanitarian organizations engaged in support programmes generally rely on some critical mass of supported health structures. The development of large medical support coverage – with for instance more than 100 healthcare structures supported by one humanitarian organization – is also useful to access severely besieged pockets. Indeed, it is difficult to cross some areas less affected by siege severity – but still facing high medical needs – without supporting structures that are active in these areas.

Because to access besieged areas, logistics constraints often prevail over medical priorities, support may be based on strategic considerations towards some health structures representing compulsory point of passage to reach other areas.

As regards capacity to follow up equipment transportation and to detect eventual diversions, it is built upon multiple alert networks distributed on various sections of chosen roads that are not necessarily connected together. Various local NGO representatives, activists networks, combatants, local authorities and other focal points are daily committed to inform humanitarian organizations of the proper transportation of their consignment and – if appropriate – of their interception. Prior work on information network maintenance is thus necessary before equipment shipping inside Syria or any other besieged area. Some humanitarian organizations have set up “Big Data” systems - i.e. tracing of information circulating on the internet – to test reliability of information networks thus developed. In case of interception of cargo bound to besieged area, or of equipment diversion after arrival, warning messages are often posted on Facebook, on Twitter, etc.
5- THE PILLARS OF ATYPICAL LOGISTICS

There are three essential rules that humanitarian organization must follow in order to bring efficient emergency answer to complex humanitarian crisis:

- **Don’t try to copy - paste into the humanitarian answer:** emergency teams must avoid reproducing intervention models identical to those they deployed in other past crisis contexts. If innovation is not an objective to reach, unlike search for efficiency, it is important to take into account crisis context specificities, in order to adapt the humanitarian context accordingly;

- **To reach acceptable balance between humanitarian risk and impact:** in this context unavoidable operational risk-taking must necessarily be associated with major humanitarian impact, even if this impact will be effective and visible (therefore measurable) only after humanitarian answer deployment;

- **To guaranty maximum operational transparency:** risks taken by emergency team members will engage the responsibility of their organization, as well as donors – whether institutional or private – who finance this type of risky operation. That risk-taking must be accepted at all organization levels, through regular reports on reached impact, risks incurred to reach them, and of course measures taken to avoid or to reduce these risks.

These three rules were generally implemented by the rare humanitarian organizations who succeeded to develop for several years quality medical support in Syria besieged areas. They could also count on strong logistics and reliable financial backbone, i.e. preserved from decisional hazards and from donors’ restrictions.

5.1 Required operational flexibility

To ensure maximum operational flexibility in unusual operating context, organizations active in besieged zones also adopted decentralization dynamic of strategic decisions alongside intervention teams closest to logistics constraints. That bottom-up operating dynamic based on trust, contrasts with usual humanitarian answers where interventions are increasingly remote directed by head quarter or – worst – by their donors.
The other key element in research for operational flexibility of support activities is to be able to ensure maximum supply consistency in hyper-volatile and unusually hostile intervention context. It is clearly through that consistency that mutual trust between support agencies and active hospitals in besieged areas was maintained.

Amongst humanitarian agencies active in besieged areas, organizations issued from Syrian diaspora are probably those who suffered the most to ensure supply regularity. Main institutional donors refused for years to finance these organizations in spite of the major work they are achieving in all Syrian opposition areas. Because of this refusal – still persisting for some donors – diaspora funding usually comes from INGOs who, themselves, are financed by institutional donors. In addition to the extra cost related to useless multilayer intermediaries involved, this funding cascade creates a bureaucracy burden often too heavy to ensure supply sustainability in besieged areas.

5.2 Risk taking vs Humanitarian impact

Risk taking inherent to support programmes in besieged areas must be regularly measured according to indicators corresponding to red lines not to be crossed. Obviously, these indicators must take into account the number of populations receiving medical care provided through this support. Risk analyses include a series of assessments, notably of logistics networks and of their performances: sourcing and suppliers’ markets assessment, access and transportation roads, evaluation of information sources during shipments, turnover of advanced storage, etc.

This huge work can only be done by a support logistics team sufficiently qualified and properly connected within Syria, more specifically in besieged areas. Because logistics departments are clearly the most exposed to fraud suspicions, and because they are also on the first line for ethically complex decision making, they should count on strong internal solidarity and consequent support. To limit their exposure, some organizations opted for a mix in their logistics between international logisticians and Syrian logisticians. This mix does not pursue to impose control on Syrian staff who would not be trustworthy but – on the contrary – to ensure sharing risk taking and step back over sometimes insoluble dilemmas. Madaya starvation observed since December 2015 is a perfect illustration of dilemmas regularly faced by logistics departments.

Siege severity of that agricultural area, one of the most serious ever met since the beginning of the conflict, no longer allows food transit since October 2015. The only available food was located at the entry gates of the besieged area under besiegers control, and sold at more than $100 per kilo. In front of galloping death cases due to acute malnutrition epidemic, some humanitarian organizations decided to buy several hundred kilos, in spite of exorbitant food price, and - at the end – it did not prevent people most affected by the epidemics to starve to death.

On the fringe of possible imbalance between incurred risks and achieved humanitarian results, to underestimate the psychological impact of supply dilemmas leads to obviously expose logistics teams in charge of support to major post-traumatic stress.

34 Besides having totally mined Madaya area surrounding in summer 2015, besiegers also mined agricultural areas
5.3 Operational transparency and professional rigor

To act outside of the norm does not mean things should not be done properly. In order to respond to specific constraints imposed by the Syrian context, humanitarian agencies and medical networks active in besieged areas had to reinvent logistics adapted to operating conditions, and had to reach an intervention discipline seldom obtained in other contexts. In the first place, these tools include transportation tracking and monitoring systems to ensure proper supplies in besieged areas. Due to this type of management tools, most organizations engaged in risk operations are able to demonstrate their efficiency with low loss rate in their supply chain.

Some agencies developed internal risk sharing policies with their main donors. By developing together some measures of risk mitigations, the funding of support programmes in Syria is done knowingly. To meet these transparency requirements much higher than other humanitarian operations, a major information work and reporting system was set up by the support organizations in Syria. A high level of requirement should indeed be reached by the support teams to justify the important risk-taking and convince internally as well as externally, the added value of their support programmes. If – as mentioned before – organizations evolving in complex crisis must comply with dynamic decentralization of strategic decisions, in return they must ensure information centralization to facilitate a possible return of experience (RETEX).

6- CONCLUSIONS

Syria war, its violence combined with international community inability to stop it and to reduce its devastating impact, shattered humanitarian principles and usual operating modes of organizations who tempt to bring aid to victims.

More than 150 years ago, Henri Dunant laid the milestones of humanitarian intervention based on three founding principles which, at that time, were innovative:

- Conflict victims no longer belong to one camp, they are neutral and we must be neutral to aid them;
- Aid organization must be permanently prepared to expected events;
- In war, humanitarian law is only required when violence and war prevail.

As regards Syrian’s context, these principles are plainly unworkable, because caring for most war injured people is not done by humanitarian organizations but by doctors, nurses and other health workers who are not neutral. On the other hand, since the vast majority of health structures located in besieged areas - as about everywhere in opposition areas - don’t want to be identified by a visible emblem for fear to be bombed, these structures are not protected by Geneva conventions.

Medical care thus provided every day to thousands of victims is not acknowledged as a humanitarian action, but rather as untrustworthy activism because nourished by partisan approach. This perception stems from a denial from operational reality of international humanitarian organizations that generally proceed in war areas with 80% national staff, although claiming neutrality and impartiality image. This distinction in humanitarian consideration is also striking when it involves denouncing massive and repeated violations of humanitarian international right in Syria.

In October 2015, when a doctor screamed against war crime after his Douma hospital bombing, his plea received very few echo in high international spheres, since that cry came from a Syrian doctor whose judgment is de facto considered as biased. But when MSF – at the same time – denounced a possible war crime committed during the bombardment by US forces on its traumatology hospital in Kunduz, Afghanistan, notably newsworthy pressure was broadly consequent. Because of this pressure, President Obama was forced to apologize to the medical organization.

---

35 JC Ruffin. L’aventure humaine, Paris, Découvertes Gallimard, 1994
36 Douma hospital bombing and, the day after, bombing of this besieged suburb market, East Damascus, killed almost 70 people and injured 550
Involved in this statement, we can logically wonder whether strict compliance to humanitarian principles is not against the causes they defend. Indeed, support activities to health structures in besieged areas certainly not literally respect these humanitarian principles, however they succeeded to safeguard minimum healthcare access for thousands people and to avoid the burden increase of this dreadful war. Support given to populations clumsily considered by the United Nations as “hardly reachable” was only made possible due to the unbelievable determination and abnegation of some logisticians who daily try to breach siege strategies in order to bring medical material to besieged areas at the risk of their life.

This article is dedicated to them as well as to all logisticians who were arrested or who perished while performing their duty.

Pierre Boulet-Desbareau
Humanitarian Expert

June 2016

Translation Advice: FBD and Alex Weiner

This Article is also available in French version on the following site:

http://emergency-log.weebly.com