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Terrorist attack in Nice: the central role of a children's hospital

On July 14, 2016, at 2230 h, a lorry crashed deliberately into a crowd in Nice, France, injuring about 500 people and killing 86 people, including ten children. The terrorist attack began close to Lenval Children's Hospital, an exclusively paediatric level 1 trauma centre. The other trauma centre, Pasteur Hospital for adults, is located further away from the attack site.[1]

Fortunately, Lenval Children's Hospital had received reinforced training to face mass casualty incidents because the European Football Championship had taken place in Nice a few months earlier. In France, severe casualties receive prehospital medical support before transfer to a trauma centre. Nevertheless, because of its proximity to the attack site, adults and children in critical condition began arriving independently at Lenval Children's Hospital before any assistance or official information had been issued by the emergency services.

When a mass casualty incident was strongly suspected, the team on duty triggered the disaster plan to activate all possible resources. The health-care staff were split into two groups: the first group continued ongoing procedures and cleared inpatient beds, and the second group prepared to face a mass casualty incident. Meanwhile, many doctors and nurses spontaneously went to the Lenval Children's Hospital after informal alerts through social media. After massive mobilisation, more members of staff were present than were needed and that the space allowed. Quickly, an order to keep reserve staff at home was given, resulting in strong feelings of frustration among those people.

44 patients were admitted in 2 h (appendix). Of these, 12 were adults: five were in critical condition, of whom four died quickly. The remaining 32 patients were children: eight were in critical condition, of whom two died later.

The trauma leader assigned the patients to the operating room, resuscitation room, or for a CT scan. The CT scanner was made immediately available, performing 15 scans during the night. Six patients needed surgery during the first 24 h. All elective surgeries scheduled for July 15, 2016, were postponed, and team rotations were reorganised to allow rest. Injuries were typical of road crashes, differing from those caused by bomb or bullets, but similar to injuries observed in Israel.[2-5] Cause of death was mainly haemorrhagic shock after multiple traumas including pelvic disjunction, head trauma, and trunk crush. During the night, child psychiatrists took care of victims, parents, witnesses, and staff. Stress disorder and dissociative symptomatology were observed—more prominently in adults than in children—and resulted in two transfers to the psychiatric emergency department at Pasteur Hospital and in disorganisation and sick leave for affected hospital staff.

Multiple debriefing meetings, both technical and psychological, were necessary and profitable for all hospital staff. Our experience confirms that every hospital, regardless of level and specialty, should be prepared to receive patients of all ages, with all types of severities and lesions.

We declare no competing interests.

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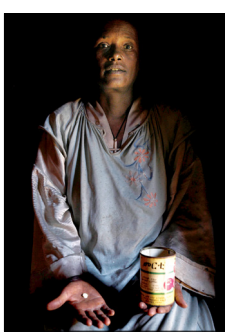
See **Online** for appendix

Dilemmas in access to medicines: a humanitarian perspective



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We challenge the assertion made by Govind Persad and Ezekiel Emanuel (Aug 27, p 932) that "expanding access to less effective or more toxic [antiretroviral] treatments rather than requiring the worldwide best treatment in all settings" is ethically justifiable.[1]

Although public health ethics can guide discussions related to the global distribution of medicines, the provision of less effective treatment exists in direct contention with a medical professional's commitment to beneficence and non-maleficence.[2] By privileging the interpretation of this dilemma through a single ethical frame, the authors deny the opportunity for health-care professionals to engage in a process of rigorous ethical reasoning.

The tension between the needs of an individual and the population at large is well established, and is often most noticeable in acute emergencies when the means available to health-care workers are not in line with the needs of the crisis-affected population. Although limited resources can be distributed based on a commitment to do the greatest good for the greatest number of people in times of crisis, it is problematic to apply the same thinking to the unequal distribution of resources over a prolonged period. For

this reason, utilitarian arguments as applied to access to medicines promote an ethics of resignation: resource scarcity is accepted as inevitable, and the pressure to identify and address inequality is diminished by the dissemination of those scarce resources within a defined population. Schrecker further develops this argument[3] when he claims that "mainstream health ethics usually accept scarcity as given and adaptation as imperative: for instance, by proposing substantive criteria or procedural algorithms for setting priorities in 'resource-poor settings'."

The authors of the Viewpoint in *The Lancet* further assume that the cost of medicines is fixed and that the only way to increase access to treatment is with further funding for global health. However, the history of access to HIV treatment has shown that cost is dynamic and negotiable. To provide suboptimal treatment to a particular patient population simply because the better treatment is more expensive is to be complicit in a system of financial profiteering within the pharmaceutical sector that compromises patient care.[4]

We are dismayed to see a resurgence of the same arguments that hampered access to treatment for patients with HIV in the 1990s.[5] We must continue to challenge the claim that the use of sub-standard therapies is permissible in low-income countries on the basis of crude cost-calculations. To further reinforce this assumption downplays the obligation of global health actors to strive for equal access to treatment for all patients worldwide.

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Authors' reply

Our Viewpoint[1] argues that expanding access to less effective or more toxic treatments is supported not only by utilitarian ethical reasoning but also by two other ethical frameworks: those that emphasise equality and those that emphasise giving priority to the patients who are worst off. Accordingly, we disagree with the suggestion by Smith and Aloudat that our Viewpoint interprets the issues at stake through a single ethical frame. In any case, however, the principles of beneficence and non-maleficence proposed in their letter would likewise support expanding access to less effective or more toxic treatments. Expanding access to such treatments is more beneficent than leaving some patients untreated. And refusing to provide these treatments because one fears causing harmful side-effects is akin to refusing to operate on a patient because one fears inflicting pain: it represents an overemphasis on non-maleficence so grave to be a dereliction of duty.

Regarding the cost of medicines, we are explicit that whether "requiring the expanded use of the world's best treatments will lower their market prices is an empirical question" with no guaranteed outcome. Smith and Aloudat somehow misread this as an assertion that the cost of medicines is fixed and unchangeable. Not so: the cost of medicines can be variable and negotiable. However, mandating provision of a treatment cannot simply be presumed to inevitably drive down the cost of that treatment. It is also surprising that the letter describes the provision of cheaper, less effective treatments as complicity with financial profiteering in the pharmaceutical sector, given that these treatments are typically less profitable generics.[2] But even if we assume for the sake of argument that providing these treatments involves complicity, leaving patients in need and untreated to keep one's hands clean of complicity is ethically unjustifiable.

As Schrecker correctly observes,[3] the inadequate resources available for global health reflect not only natural constraints but also unwise social and political choices.[3] However, pitting efforts to reduce inequality and better fund global health against efforts to put available resources to their best use mistakes complementary objectives for conflicting ones. Trade-offs between spending priorities are not confined to crisis situations, and would remain inescapable even if global health funding were to grow exponentially.[4] Refusing to consider cost-effectiveness or set clear priorities—which need not be utilitarian—among competing global health objectives is not humanitarian. It does not expand available resources or combat global inequality and injustice. It simply wastes money and leaves room for arbitrary decision making.

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