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Letter to the Editor

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HEROIN ADDICTION & RELATED CLINICAL PROBLEMS

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30 years of Naloxone

Massimo Barra and Vittorio Lelli

Villa Maraini, Italian Red Cross (CRI), Rome, Italy, EU

TO THE EDITOR: Since August 1976, when we started our therapeutic activities at the Villa Maraini Foundation in Rome, our team has considered the safeguarding of drug users' lives as being the top priority of any antidrug intervention.

The ancient Romans used to say: "primum vivere, deinde philosophari", meaning: "first survive, then theorize". So, if you want to treat a drug user, he/she has to be alive!

At that time, naloxone was not available in Italy, whereas nalorphine was; this substance, which is an opioid antagonist, can only be taken under medical supervision, because of possible breathing depression which can arise if an overdose has been caused by the use of a mixture of opioids and other substances that depress the central nervous system.

The arrival of naloxone, which does not present any such negative effect, made us think about its possible use by specifically trained non-medical staff.

We learnt that naloxone is probably the only medication in the pharmacopoeia which is free from contraindications. Being a pure antagonist of opium derivatives, it can save life in a case of heroin overdose, while it has no negative consequences in any other case: of course, it can provoke a temporary withdrawal syndrome, if the patient in question has a physical dependence on heroin.

As early as 1980, during the first meeting that took place in Strasbourg from 19th till 21st May, the Red Cross/Red Crescent international group of drug

experts run by us considered "[...] the possibility of including this specific opioid antagonist in the Red Cross/Red Crescent first aid kits, while training first aiders, including volunteers, in the use of that substance. This is possible because that life-saving medicine for drug users [i.e. naloxone] is free from contraindications [...]" (Figure 1).

Since then, thanks to our intense and evidence-based advocacy action, we have succeeded in reaching the point where naloxone is considered a life-saving medicine, which has to be available in any pharmacy without a prescription. At the beginning, this was a unique case – together with saline liquid, distilled water and immunizing serum for viper poison – of an injectable substance in a phial being sold 'over the counter'. Lately, the immunizing serum was made subject to the medical prescription regime because of contraindications that had been noted in the meantime.

In the 80's and 90's, many people were against the proposal that non-medical staff could be allowed to administer naloxone, considering this to be exclusively a medical act. Even the nurses of the Italian RC emergency units considered the use of naloxone as falling outside their sphere of competence. But we supported, and still support, the idea that a state of necessity may actually justify the violation of laws, if this is the only way to prevent a death that is otherwise inevitable.

We assume that a credible antidrug strategy

Figure 1. 1980 International Red Cross Statement

REUNION DU GROUPE D'EXPERTS CROIX-ROUGE
SUR LA TOXICOMANIE CHEZ LES JEUNES

KLINGENTHAL/STRASBOURG (FRANCE)

19 - 21 MAI 1980

GROUPE CONJOINT
COMITE CONSULTATIF JEUNESSE
COMITE CONSULTATIF SANTE/AFFAIRES SOCIALES

6. Le Groupe considère que l'on devrait étudier la possibilité, en particulier dans les pays où la consommation des opiacés représente un problème, de doter les trousse de secourisme Croix-Rouge du médicament antagoniste spécifique (Naloxone) en formant au préalable les secouristes y compris les volontaires à l'utilisation de ce produit. Ceci est rendu possible par le fait que ce produit ne présente pas de danger et qu'il peut positivement sauver la vie dans le cas d'overdose,

should be able to reach as many drug users as possible.

Antidrug centres should adopt any possible initiative in order to guarantee full access to patients; currently that is not happening in far too many parts of the world.

Anyone who goes to an antidrug centre is more motivated than someone who does not.

Antidrug centres' services should reach out to drug users in the streets, where they live out their daily tragedy.

That is why, since March 25th, 1992 we have set up an emergency service, which is operational twenty-four hours every day, and has two mobile units that can quickly reach areas highly exposed to drug trafficking and drug use.

In a case of overdose, first aid intervention at a hospital might not be enough, because the patient could be dead on arrival there. This is the reason why we need to use naloxone in a timely way - in the streets, at home and wherever an overdose occurs.

By now there are many situations similar to "shooting rooms", even if they are illegal in Italy. Many drug users, even those not motivated for treatment and rehabilitation, ask the staff of these mobile units for sterilized injection kits, often informing them about where they will take drugs. In this way we can intervene in cases of overdose. Many of these drug users are trained to use naloxone, in the sense that they receive elements of advice on overdose prevention; besides, those considered most exposed to overdose are periodically provided with two naloxone phials.

This health education, together with the distribution of naloxone phials, is also addressed to drug users' parents, relatives, friends and anybody else who is interested.

During such training sessions, we point out that overdose risk normally increases after periods of prolonged abstinence related to detention or detoxication. In fact, we explain that, in such cases, doses have to be adapted, by considering the fall in tolera-

tion levels.

It has to be considered that physical detoxification does not cover all the therapeutic requirements of a drug addict; it may not even be suitable, or actually dangerous.

For example, wealthy drug addicts, in an attempt to safeguard their own reputation, often resort to temporary remedies, such as detoxification, instead of undergoing the ordinary treatment based on methadone or buprenorphine therapies, because their privileged social position make them think that an expensive detoxification treatment will be more effective than a low-cost therapy.

However, these interventions, which can clean a drug user in a few weeks, or even in a few days, do not allow any control over the development of the addiction, because there is the factor of exposing the patient to a high risk of overdose.

The overdose risk also increases in connection with:

- 1. A combined intake of heroin together with other depressants such as alcohol;
- 2. Any use of the drug when alone, whether at home or in hard-to-reach places;
- 3. New dealers;
- 4. The use of heroin that is too pure or of bad quality.

Our experience in the field has shown us that, contrary to common beliefs, long-lasting drug users are more exposed to the risk of overdose than younger ones; furthermore, we have noted that, in certain areas, overdose cases normally occur in three or four episodes, with only short time-lapses in between, followed by a sequence of other days in which no further episodes are recorded.

Only a few grams of heroin are needed to provide many people with their own dose and, if it is badly prepared or too pure, that will easily result in an overdose situation.

In August 1995, the death of 6 people in Palermo, occurring within a few hours, due to heroin that had arrived in that city in an excessively pure state, represents a striking case in that sense. The local government representative as well as the mayor asked us for immediate intervention and, already on the first day, we saved 6 drug users in a state of overdose and more than a hundred in the following 3 months.

In cases of overdose, our protocol prescribes an

immediate intramuscular injection of two naloxone phials; if the skin is hard to reach, the injection has, whenever necessary, to be performed through the clothes.

After this first intervention the next step must be diversified to take into account the age and medical condition of the patient.

For young drug users, for whom it is normally easy to find an accessible vein, we perform an intravenous injection of naloxone, which can be repeated a number of times.

For long-lasting drug users, instead, we inject a further phial of naloxone under the tongue, because in their case suitable veins are normally hard to find, and unsuitable ones often give rise to occlusions in needles.

From the beginning of our outreach work until 31st December 2013, we carried out 2,139 overdose interventions, all of them duly recorded, saving as many drug users' lives.

In addition, there are many interventions that cannot be quantified exactly because they are merely reported by drug users who have been previously instructed, and provided with naloxone phials by Villa Maraini.

As pointed out above, so far we have never noted contraindications in the use of naloxone.

We therefore see it as being the most effective measure for preventing the lethal consequences of opiate overdoses.

We claim to have been the first practitioners in the world to theorize the use of injected naloxone by non-medical staff for overdose prevention, and to have performed the highest number of successful overdose interventions in non-medical settings.

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