

Cleaning injecting equipment: a message gone wrong?

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Over 100 syringe exchange schemes exist in the United Kingdom,¹ aiming at limiting the spread of HIV among drug users. The main strategy is to reduce sharing of injecting equipment by providing information about HIV and AIDS and supplying sterile equipment. If clean injecting equipment is not available the next best step is to clean used equipment properly. This approach was adopted in San Francisco in a "teach and bleach" campaign.² Cleaning should rid the equipment of any blood products that might contain HIV. The best method is to boil the equipment, but this is rarely done and may damage some syringes. The next best method is to flush soapy cold water, then concentrated bleach, and then further cold water through the equipment, doing each step two or three times; using warm water initially may cause clotting and hence retention of blood products. We assessed knowledge of the recommended technique among drug users and drug workers.

Methods and results

During February 1989 we interviewed 44 drug takers from the outpatient clinic of a drug dependence unit and a street agency. All had injected drugs at some time. We also did a telephone survey of the needle exchanges in London, asking what advice on cleaning equipment they gave to people.

Describing what they thought was the officially recommended method of cleaning injecting equipment, five drug takers said that the equipment should be boiled for five minutes; 10 that it should be flushed through with boiling water; eight that it should be flushed through with bleach diluted with boiling water; five that it should be flushed through with warm water and washing up liquid; and eight that it should be flushed through with a sterilising agent (Milton),

lemon juice, alcohol, or an antiseptic agent (TCP) and boiling water. Eight said that it should be disposed of and new needles and syringes used. Only 10 out of 42 cleaned equipment in a manner that they knew was not recommended; 11 always used new equipment, and 21 followed what they thought was the recommended method. When asked what had influenced them to clean their equipment the way they did 21 said that it was common sense, seven had received information from street agencies, eight had read leaflets, and only three had got their information from a doctor or nurse.

In the telephone survey most agencies admitted to confusion over the most advisable method of cleaning. Many said that they would try to dissuade drug takers from using old equipment. The most common mistake was to recommend flushing with warm water.

Comment

Reducing harm among drug takers entails providing conflicting messages, such as "Don't share but if you do share clean your works [equipment]." Despite, or probably because of, the effort to provide sterile injecting equipment, the cleaning of dirty equipment is rarely discussed. Sharing injecting equipment has become difficult to discuss. Staff working with drug takers must break this taboo and provide education on the correct cleaning methods.

The fact that 21 (48%) of our subjects thought that they followed the recommended cleaning method and 31 (70%) cleaned their equipment in a manner that might result in retention of blood products emphasises the importance of providing clear instructions on cleaning techniques. Studies have shown that people who inject drugs are amenable to change.³ Leaflets containing guidelines on cleaning should be handed out each time injecting equipment is exchanged.

1 Farrell M. Conference report: new models of services for drug misusers. *Bulletin of the Royal College of Psychiatrists* (in press).

2 Newmeyer JA. Why bleach? Fighting AIDS contagion among intravenous drug users; the San Francisco experience. *J Psychoactive Drugs* 1988;20:169-72.

3 Stimson G, Dolan K, Donoghoe M, Aldritt L, Lart R. Syringe exchanges: can injectors change? *Druglink* 1989;4(1):10-1.

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Symptoms of oestrogen deficiency associated with supraphysiological plasma oestradiol concentrations in women with oestradiol implants

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Implants are effective for menopausal symptoms¹ and seem to conserve postmenopausal bone mass.² Thom *et al* reported that after implantation of 50 or 100 mg oestradiol "levels of oestradiol with either dose begin to decrease slightly at four months and this change is noticed by many women who feel that the implant has worn off."³ Our interpretation of their data is that the mean plasma oestradiol concentration was 60 pmol/l before treatment and roughly 300 pmol/l when symptoms returned.

In a prospective study by Barlow *et al* of 75 women treated with implants of 50 mg oestradiol either alone or with 100 mg testosterone every six months symptoms recurred when the plasma oestradiol

concentrations were above the pretreatment range.⁴ Both groups suggested that symptoms return when the plasma oestradiol concentrations start to fall, not when the pretreatment value has been reached. In addition, Barlow *et al* reported accumulation of oestradiol, the mean pretreatment value of 175 pmol/l rising to a mean of 669 pmol/l at 36 months, six months after the last implantation.⁴

In clinical practice new implants tend to be inserted when symptoms recur. We suspected that if Thom *et al* and Barlow *et al* were correct serial implantation based on the recurrence of symptoms might result in some patients eventually developing supraphysiological concentrations of oestradiol but complaining of classic symptoms of oestrogen deficiency. We present data on 12 such patients.

Case reports

The 12 menopausal patients either had been referred to our clinics having been treated elsewhere or had received all their treatment at our clinics. Re-implantation had been based on the recurrence of vasomotor and psychological symptoms such as mood swings and irritability. All patients had started treatment with implants of 50 mg oestradiol inserted every six months, but many patients had coerced their