What is 'sharing'?

Are we double-counting the number of people at risk from sharing injecting equipment?

DRUG SERVICES were given one clear target in the Department of Health's *Health of the Nation* (1992) strategy and in the associated *HIV/AIDS and Sexual Health* (1993) key area handbook. The aim was "to reduce the number of injecting drug misusers who report sharing injecting equipment in the previous four weeks" – more precisely, to halve the sharing rate from a baseline of 20 per cent of injectors in 1990. This baseline is a good estimate derived from research at the Centre for Research on Drugs and Health Behaviour and the Public Health Laboratory Services' collaborative survey (the 'spit tests').[1]

Questionnaires used in both studies asked about lending and receiving equipment. The Centre for Research asked:

1. "... did you inject with a needle or syringe that had already been used by someone else?"

2. "... did you lend, pass on or let someone else use one of your used needles or syringes?"

If the answer to *either* question was positive the respondent was deemed to have shared.

Similarly the PHLS study asked:

1. "... to how many people have you passed on used needles or syringes ...?"

2. "... from how many people have you received used needles or syringes ...?"

These questions, or something like them, have continued to be used in other surveys.

Either a lender or a borrower?

There is a logical fallacy here. Imagine 20 drug users, 10 called Smith and 10 called Jones. Each Smith is friendly with a different member of the Jones clan. All the Smiths go to their needle exchange and always inject with clean equipment, which they then pass on to their friend among the Jones's. Then a researcher asks each whether they have passed on *or* received injecting equipment.

All the Smiths would say 'Yes', they have passed on equipment; all the Jones's would say 'Yes', they have received equipment. The sharing rate would be reported as 100 per cent. *But only 50 per cent, the Jones's, are at risk of infection from contaminated equipment.* We would have overestimated the risk behaviour of this sample by a factor of two. If we want to know how many people are at risk from blood-borne infections, we should define sharing as using *injecting equipment that has been used by somebody else* (including needles, syringes, spoons, water and filters).

Though this is logical, does it make any sense in the real world? One could argue that there are likely to be very few drug injectors who pass on used injecting equipment but never receive it from others. Even if this were true, it would not eliminate the error. There would be less of an overestimate of the *number of people* who have shared, but we would still double-count the *rate* at which they shared, as each would be counted once as a receiver and once as a passer on.

Counting *either* receiving or passing on used equipment as sharing may not make sense if we want to know how many people are at risk of infection, but it does make sense if we want to know how many we could target for risk-reduction messages. In the example above, all the Smiths and the Jones's should be encouraged not to pass on or receive used equipment.

> There is a logical fallacy in how we count 'sharing'

Consistency is the key

In East Anglia in 1993 we tried a questionnaire which did not attempt to define sharing but just asked, "When did you last share any works? (This includes needles, syringes, spoons, filters and water)". Learning from the advertising industry, we used a single sheet that could be folded and stuck with the FREEPOST address showing, and then just popped in a post box. This seemed to work well, and we have repeated the survey in 1994. In 1993, 22 per cent of respondents admitted 'sharing' in the past four weeks, falling to 12 per cent in 1994.[2]

Workers at the Drug Research Unit of the University of Manchester adapted this questionnaire for their own survey in 1994. They are trying very detailed sharing questions and have still managed to limit it to one side of paper.

Of course, the 'true' rate of sharing will never be known, but progress towards targets can be estimated by examining trends over time. To have confidence in trends means that surveys have to be repeated, consistently asking the same questions in the same way, either of the same people, or of people selected in the same way. One problem with not doing this in the same way nationwide is that cross regional comparisons are complicated, perhaps impossible. I hope this article stimulates some more debate on what we are trying to find out and why we want to know, so that we can agree on the essential questions and the methods used to answer them. ❍

from
Stephen Green
Health of the Nation, Anglia and Oxford Regional Health Authority, Union Lane, Chesterton, Cambridge, CB4 1RF, phone 01223 375331.

1. The Centre found a sharing rate of 21 per cent among 869 attendees of 20 syringe exchanges in England. The PHLS reported rates of 18 per cent in 1990 and 19 per cent in 1991.

2. Copies of the report of the 1994 survey can be obtained from the author.