

A Public Health Initiative for Steroid Users in Victoria

Campbell Aitken and Cheryl Delalande

*Macfarlane Burnet Institute for Medical Research and Public Health, Fairfield,
Victoria & North Eastern AIDS Prevention Program,
Darebin and Banyule Community Health Services, Victoria*

Anabolic steroid injectors are at risk of infection with blood-borne viruses (BBVs), but have received little attention from researchers, practitioners or agencies working in public health. In recognition of this gap, in early 1996 the Steroid Peer Education Project (SPEP) began providing part-time mobile needle and syringe distribution and health information and referral services to steroid injectors in north-eastern Melbourne. Demand repeatedly caused the project to expand, and its sole peer worker now operates Victoria-wide, five days per week. Basic information on injecting practices collected from SPEP clients showed that many were at risk of BBV infection. This led to the initiation of a collaborative research project, in which SPEP clients were tested for BBV antibodies and provided detailed information about their risk behaviours. Of 29 steroid injectors tested between May and August 1999, three (10%) had antibodies to the hepatitis C virus, and they described behaviour which could spread the virus to other steroid users. These results show that blood-borne viruses are present in the Victorian steroid injecting community, and reinforce the SPEP's commitment to reducing harm in this group.

Key Words: Public Health; Steroid Use; Blood-borne Viruses

The practice of injecting anabolic-androgenic steroids was a well-recognised phenomenon by the time Needle and Syringe Programs (NSPs) were introduced in Victoria in the late 1980s. NSPs were established to prevent the spread of HIV among injecting drug users by providing clean injecting equipment, and heroin and amphetamine injectors were quick to make use of this service. In contrast, steroid users were only infrequent users of NSP services. Some steroid users who did use NSPs to obtain injecting equipment reported feeling uncomfortable because they did not consider themselves to be "drug users". Others did not realise they could use NSPs, or even that NSPs existed.

In the early 1990s several attempts were made by primary NSPs in Victoria to reach steroid users in order to reduce the harm potentially associated with injecting steroids. These attempts included distribution of promotional information on steroid use via gyms, and initiatives in which educators experienced in outreach to heroin and amphetamine injectors visited gyms and attempted to contact steroid users. Unfortunately, these early programs experienced great difficulty in penetrating the tight-knit steroid-using subculture, and their apparent ineffectiveness in reaching steroid users made it difficult to justify their continuance.

The Steroid Peer Education Project

By early 1996, the manager of the North-Eastern AIDS Prevention Program (the second author) was in regular contact with several local steroid injectors, and developed some insights into the magnitude of steroid use in Victoria and the risk behaviour occurring among this group of injectors. In particular, Cheryl built up a rapport with one of Melbourne's champion male bodybuilders, and through this relationship formed the opinion that a peer-

based approach was necessary to reach steroid users and reduce harm. In May 1996 Cheryl obtained funding from the Victorian Department of Human Services for a six-month pilot program called the Steroid Peer Education Project (SPEP). It was funded to provide steroid injectors in the north-eastern suburbs of Melbourne with specialised needle and syringe distribution and collection services, as well as health information and referral.

The SPEP commenced with one peer worker (the bodybuilder referred to above) visiting gyms one day per week and responding to requests for injecting equipment received by mobile phone. Within weeks the demand for his services exceeded supply. His immediate acceptance by his peers as a legitimate health care worker was due to his credibility and standing in Melbourne's steroid-using community. In response to the unmet demand for injecting equipment and safer use information, in January 1997 the Department of Human Services funded the project on an on-going basis to include a female peer worker (also a well-credentialed bodybuilder) and to operate three days per week across the Melbourne metropolitan area. Word-of-mouth about the SPEP in the steroid-using subculture was positive, and demand soon began to tax the resources of the expanded but still part-time service. Calls were being received from all over Victoria and interstate, some requesting injecting equipment, many asking for information about safer steroid use. In January 2000, program finance was increased again, this time to allow the SPEP to operate Victoria-wide, five days per week (with one peer worker).

Research Based on the SPEP

Like people who inject heroin, amphetamines or other drugs, people who inject steroids may be at risk of hepatitis C and other blood-borne viruses. Informal

assessments of the information routinely collected from clients of the SPEP suggested that many were practising behaviours, which could facilitate blood-borne virus transmission. To produce more formal evidence of risks, the SPEP's manager contracted a researcher (the first author) at the Macfarlane Burnet Centre for Medical Research to collate and analyse information about clients' steroid-using behaviours. Analysis focused on data collected from steroid users who collected injecting equipment from the SPEP workers between January 1997 and January 1998. The results were published in the *Medical Journal of Australia* in 1998 (Delalande, Aitken, Mercuri, & Stanton, 1998). Of the 127 SPEP clients reached during this period, 6% had injected steroids or other drugs with someone else's used needle; 14% had reused their own needle; 15% had injected drugs from a shared container, and 14% had injected drugs other than steroids. The research demonstrated that there was clear potential for the spread of blood-borne viruses among steroid injectors in Victoria.

Confirmation that Victorian steroid injectors were at risk of blood-borne viruses was a useful first step. The obvious next stage was to undertake research to see if evidence of viral infections could be detected in steroid injectors. A literature search revealed that very little prior research had been conducted along these lines; only three articles describing blood-borne virus prevalence among multiple illicit steroid injectors exist. Morrison (1994) discovered a single case of exposure to the hepatitis C virus among five steroid injectors tested in Liverpool; Crampin, Lamagni, Hope, Newham, Lewis, Parry and Gill (1998) identified three hepatitis B antibody-positive steroid injectors among 149 sampled over six years of the UK's Unlinked Anonymous HIV Monitoring Survey of IDUs; and O'Sullivan, Kennedy, Casey, Day, Corrigan and Wodak (2000) tested 38 past, present and potential steroid users resident in New South Wales for hepatitis B and C exposure and 32 for HIV exposure and found antibodies to none.

After a successful application to the National Health and Medical Research Council for funding, SPEP and Macfarlane Burnet Centre staff began work on a study in which steroid injectors would be interviewed and invited to provide a blood sample for testing for exposure to hepatitis C, hepatitis B and HIV. A simple questionnaire was developed, and the SPEP outreach worker was trained in venipuncture and to deliver hepatitis C and HIV test results with appropriate counselling. The SPEP worker began recruiting, interviewing and taking blood from steroid injectors in mid-1999 (while continuing to provide mobile needle and syringe distribution and collection services). Of the 29 blood samples collected between May

and early August 1999, three (10%) contained antibodies to the hepatitis C virus (Aitken & Delalande, 1999). Thus ours is the first study to report evidence of hepatitis C infection in multiple steroid injectors.

The three steroid injectors in whose blood we found hepatitis C antibodies reported many risk factors other than injecting steroids, such as injecting heroin and amphetamines, and sharing needles to inject those drugs. (Approximately 60% of injecting drug users recruited at NSPs in Melbourne in 2000 had been exposed to the hepatitis C virus, so sharing needles to inject heroin or amphetamines is a particularly risky behaviour - National Centre in HIV Epidemiology and Clinical Research, 1999). In addition, all three had been in prison, and two had injected drugs while behind bars. From this preliminary evidence, it was clear that the hepatitis C virus existed in the Victorian steroid-using population, although the exposed individuals seemed unlikely to have been infected through injecting steroids given the other risk factors described above. Nevertheless, the study documented many risk practices occurring among hepatitis C-exposed and non-exposed participants, which could easily transmit the hepatitis C virus to other steroid injectors. The results of our research are strong arguments for continuing to work to reduce harm to steroid users (who may be around a third as numerous as heroin users, with an estimated 0.2% of the population reporting recent use of steroids in 1998 compared to 0.7% using heroin - Australian Institute of Health and Welfare, 1999) through user-specific needle and syringe distribution and peer education.

Future Developments

The SPEP is continually exploring new ways to improve its services for steroid users. A strong relationship has developed between the SPEP and a Melbourne GP with an interest in steroid use, and the SPEP's clients are now regularly referred to him for health assessment and monitoring and other related issues. SPEP staff conduct seminars for NSP staff and others working in primary health care across Victoria. The addition of broad-based counselling to SPEP services is being considered due to the substantial rates of mental and emotional problems associated with the use of steroids and the lifestyles of many users, such as body image disorders, relationship problems and social dysfunction (Copeland, Peters, & Dillon, 2000). Anabolic-androgenic steroid use is a phenomenon which is here to stay, and the SPEP remains committed to the pursuit of what we believe to be effective and appropriate methods of reducing harm to steroid users' health.

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References

Aitken, C.K., & Delalande, C. (1999, August). Preliminary results from a seroprevalence survey of steroid injectors in Victoria, Australia. *Proceedings of the 2nd Australasian Conference on Hepatitis C*, Christchurch.

- Australian Institute of Health and Welfare (1999). *National Drug Strategy Household Survey, 1998*. Canberra: AGPS.
- Copeland, J., Peters, R., & Dillon, P. (2000). Anabolic-androgenic steroid use disorders among a sample of Australian competitive and recreational users. *Drug and Alcohol Dependence, 60* (1), 91-96.
- Crampin, A.C., Lamagni, T.L., Hope, V.D., Newham, J.A., Lewis, K.M., Parry, J.V., & Gill, O.N. (1998). The risk of infection with HIV and hepatitis B in individuals who inject steroids in England and Wales. *Epidemiology and Infection, 121* (2), 381-386.
- Delalande, C., Aitken, C.K., Mercuri, P., & Stanton, K. (1998). Risky practices among people who inject steroids. *Medical Journal of Australia, 169* (1), 62.
- Morrison, C.L. (1994). Anabolic steroid users identified by needle and syringe exchange contact. *Drug and Alcohol Dependence, 36*, 153-156.
- National Centre in HIV Epidemiology and Clinical Research (1999). *HIV/AIDS, Hepatitis C and Sexually Transmissible Infections in Australia: Annual Surveillance Report, 1999*. Sydney: Author.
- O'Sullivan, A.J., Kennedy, M.C., Casey, J.H., Day, R.O., Corrigan, B., & Wodak, A.D. (2000). Anabolic-androgenic steroids: medical assessment of present, past and potential users. *Medical Journal of Australia, 173*, 323-327.

Campbell Aitken
The Macfarlane Burnet Institute for Medical Research and Public Health
PO Box 2284
Melbourne, Victoria, 3001
AUSTRALIA
Email: aitkenc@burnet.edu.au

Cheryl Delalande
North Eastern AIDS Prevention Program
Darebin & Banyule Community Health Services
Cnr Blake and Crevelli Streets
East Reservoir, Victoria, 3073
AUSTRALIA
Email:cheryl@bchs.org.au

Correspondence to Campbell Aitken