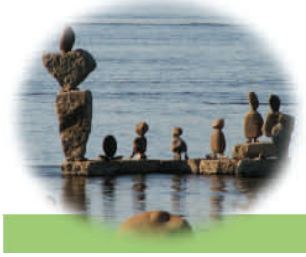
Canadian Institutes of Health Research | Instituts de recherche en santé du Canada



Institute of Population and Public Health

CIHR IRSC

Applied Public Health Chair
Impact Case Study

Dr. Benedikt Fischer
Reducing hepatitis C transmission among crack users

Research Focus

Street drug users live with many risks. However, the threat of contracting infectious diseases such as HIV and hepatitis C virus (HCV) from shared drug paraphernalia is one of the greatest health threats that this vulnerable population faces.

While needle-exchange programs are now commonplace for injection drug users in many urban areas, little has been done to reduce the risk of exposure to communicable diseases among crack users—a population that has experienced an explosive increase in cities across Canada in recent years.

To assist in developing evidence-based interventions aimed at this group, Applied Public Health Chair Dr. Benedikt Fischer and his team of researchers examined HCV transmission among crack users.

They found that people who smoke crack can develop oral lesions and burns from hot or broken pipes (which are often made of glass or thin metal), and that HCV has been detected on crack paraphernalia. Therefore, crack users who share equipment could potentially share HCV and other communicable diseases, as well.

Based on this evidence, the BC Centre for Disease Control has implemented a safer crack paraphernalia distribution program in Nanaimo and other communities in the province as part of its harm-reduction strategy for high-risk drug users. A number of local health authorities and individual service provider agencies in the province have followed suit.

While politically controversial, the program is an integral component of BC's prevention, treatment, and care continuum for drug dependence—a chronic, relapsing medical condition that is a major population-health issue in countries around the world.

Research Impact: Making a Difference

Dr. Fischer and his colleagues studied crack use in three mid-sized BC communities – Nanaimo, Campbell River and Prince George. The findings, which included data culled from hour-long interviews with 70

Nanaimo crack addicts, indicated that 80% of study participants had shared their crack pipes in the past 30 days and 44% had done so on more than 20 occasions. Nearly half made their crack kits from such make-shift items as pop cans, glass bottles, or inhalers—and almost half tested positive for the HCV antibody. Of the 51 crack pipes examined, one tested positive for HCV.

In response to the study, organizations in several communities now distribute safer crack paraphernalia kits to street drug users. The kit contains a length of rubber tubing that can be attached to the stem of a crack pipe to serve as a mouthpiece. This helps to reduce the risk of HCV transmission because the user's mouth does not come into direct contact with a hot or jagged pipe stem, and because there is less need for sharing.

Although this is a relatively new initiative, the effort is already demonstrating how targeted, applied research and the effective translation of evidence into policies and programs can have a substantive and sustained impact on public health.

Addicts in some of the communities affected by the distribution program have already indicated that the new kits have reduced their need to share paraphernalia and given them access to safer materials. Researchers will systematically evaluate the specific extent of the program's impact on public health through an upcoming study that will focus on outcomes—such as HCV rates, drug-use behaviours, and the responses of communities, politicians, and law enforcement agencies.

The expansion of this initiative to other BC communities, other provinces and territories, and other countries could have a dramatic effect on public health by drastically reducing infectious disease transmission risks in street-based crack users—an outcome that can only benefit the health of the population as a whole.

Want to Know More?

For more information, please visit: http://www.fhs.sfu.ca/portal_memberdata/bfischer

Dr. Benedikt Fischer is the CIHR/PHAC Applied Public Health Chair in Infectious Diseases, Substance Use, Marginalized Populations and Public Health

Chair Contact Information
lise.gauvin.2@umontreal.ca