Engaging with people who use image and performance enhancing drugs: one size does not fit all.

The recent commentary 'The unintended consequences of emphasising blood-borne virus (BBV) in research on, and services for, people who inject image and performance enhancing drugs' (Underwood, 2019) is a valuable contribution to our appreciation of the complexities and also the basics of harm reduction. Clearly, some who use anabolic androgenic steroids (AAS) and associated drugs do not consider BBV to be a significant issue, in fact, they feel it a distraction from their legitimate concerns. Underwood gives a voice to the frustration that a population of enhanced bodybuilders feel and expresses their resentment that they, as the experts in their own behaviours, are not heard beyond their peers and that the work of some researchers in the field is a misrepresentation of their lives. As an author of some of this research and the specific target of online criticism from some enhanced bodybuilders, I can appreciate their frustration, understand their criticism but reassert the research findings and conclusions of my work. Until relatively recently, there was little evidence of BBVs amongst those who use AAS. Occasional case reports and results from small-scale studies supported the consensus that although there were potential risks, BBVs amongst those who use AAS was not a significant public health issue.

The publication of United Kingdom (UK) research (Hope et al., 2013) provided important new evidence of the presence of BBV amongst AAS users. These finding are robust and have been supported in subsequent work (Hope et al., 2016), with findings of undiagnosed hepatitis C also being a cause for concern (Hope et al., 2017). As an author of this work I recognise, and have stated the limitations to this work, regarding its generalisability to countries beyond the UK or even its applicability to all populations of AAS users in the UK (Hope et al., 2013). Furthermore, it has not been claimed that HIV or other BBVs were transmitted through the administration of anabolic steroids and associated drugs, but that amongst this population of people who use AAS, prevalence of HIV was similar to those injecting psychoactive drugs in the UK (Hope et al., 2013). Transmission is likely to have occurred for at least some, during prior injection of psychoactive drugs or through unprotected sex. Additionally, the populations of those using AAS within our studies were characterised by high levels of cocaine use (46% had snorted cocaine in the previous year) and higher levels of incarceration than seen in the general male UK population.

It is unsurprising that some enhanced bodybuilders, do not feel that these characteristics and associated risk behaviours are an accurate reflection of their lived experience and therefore their priorities. For some enhanced bodybuilders it is the management of anabolic-androgenic steroid induced hypogonadism (Tan & Scally, 2009) or reduction of long-term cardiovascular risks (Baggish et al., 2017) that are of far greater import.

For researchers, this demonstrates the importance of not only delivering impactful research but in ensuring that the recipients hear the full, nuanced and often complex findings. It is essential that in delivering our conclusions, we not only serve one section of the population, and we do not inadvertently create a barrier to service engagement for another. Furthermore, while we cannot control how the media represents our work, a concerted effort to engage and influence journalists may reduce the occurrence and magnitude of misleading stories. Various methodologies have identified a range of different typologies (Christiansen, Vinther, & Liokaftos, 2016; Dawson, 2001; Hildebrandt, Langenbucher, Carr, & Sanjuan, 2007; Zahnow et al., 2018), however, this spectrum of users may be even broader than previously indicated. I fully support Underwood's conclusion that it is essential that harm reduction initiatives and research address the varying needs of diverse populations of people who use AAS and that all their voices are heard.

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