MAY 2018 VOLUME 1, ISSUE 1

HUMAN ENHANCEMENT DRUGS

HED Matters

Photo: Tim Bingham & Noreen Bingham

Theme: Performance and Image Enhancing Drugs

HEDN Editorial

Hello and Welcome!

The Human Enhancement Drugs Network (HEDN) was established in February 2015 and since then has rapidly been growing. We currently have around 80 members of various backgrounds from 15 different countries. We can truly say that HEDN is a multi-disciplinary and international network including scholars, healthcare providers, anti-doping professionals and various other stakeholders active in the field of human enhancement drugs.

We thought it was high time to thank our members and to inform them of HEDN's achievements and future plans by developing HED Matters! HED Matters contains articles on current enhancement drugs issues and news. It will be published on a bi-annual basis.

Current and Future Editions

Each edition will have its own theme, highlighting various topics related to the use of human enhancement drugs. In this edition the focus will be on anabolic androgenic steroids (AAS) and other performance and image enhancing drugs (PIEDs).

We have contributions from several HEDN members. Dr Paul Dimeo from Stirling University and Prof Verner Møller from Aarhus University shine some light on their new book, 'The Anti-Doping Crisis in Sport: Causes, Consequences and Solutions'. In a Q&A with Fredrik Lauritzen from Anti-Doping Norway, he answers various questions related to the preventive measures Anti-Doping Norway undertakes to address the use of PIEDs in the fitness sector. We have a current and former steroid user talking about their experience with the healthcare system. A spotlight is put on the senior researcher Dr Kate Seear from Monash University and the early career researcher Charlotte Mclean from Liverpool John Moores University. Finally, Katinka van de Ven, Matthew Dunn and Kay Stanton provide some harm reduction tips for healthcare providers and users.

The next HED Matters will focus on cognitive enhancers. Feel free to contact us if you would like to be in the spotlight for the next edition!

Thank You!

As a final note, we would like to thank all the members for their valuable contributions to the HEDN and hopefully continue to do so in the future. We would not have been here today without you! So, 'thank you'! We hope you enjoy reading HED Matters.

Yours sincerely,

The HEDN Board:
Dr Katinka van de Ven
Dr Kyle Mulrooney
Anders Schmidt Vinther
Dr April Henning

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HEDN Activities & Achievements

Since the HEDN was created we have been involved in a number of activities with members of the network and others in the field, for instance:

1) Development of PIED Infographics

The idea behind the infographics was to communicate relevant information for healthcare providers based on the latest research in the field of performance and image enhancing drugs.

All the infographics are freely available on our website: www.humanenhancementdrugs.com

2) Coordination of HED panels at conferences

Examples include the two HED panels we coordinated for the annual International Society for the Study of Drug Policy (ISSDP) conference held by Centre for Alcohol and Drug Research at Aarhus University in 2017.

3) Setting up special issues for academic journals

The HEDN Editorial Board are editing a special issue for the journal Performance Enhancement & Health. The purpose of the special issue, "The Dark Side of Performance Enhancement, Sport and Lifestyle", is to address the fine line dividing a healthy lifestyle and an unhealthy obsession with improving the human condition.

4) Routledge HED Book

The founders of HEDN, Dr Katinka van de Ven and Dr Kyle Mulrooney, are currently editing a new book on human enhancement drugs in collaboration with James McVeigh from the Public Health Institute at Liverpool John Moores University. The HED book will include contributions from leading experts in the field of human enhancement drugs. Many of which include HEDN members. This book is designed to be both used in educational settings and by professionals and academics working in this area.

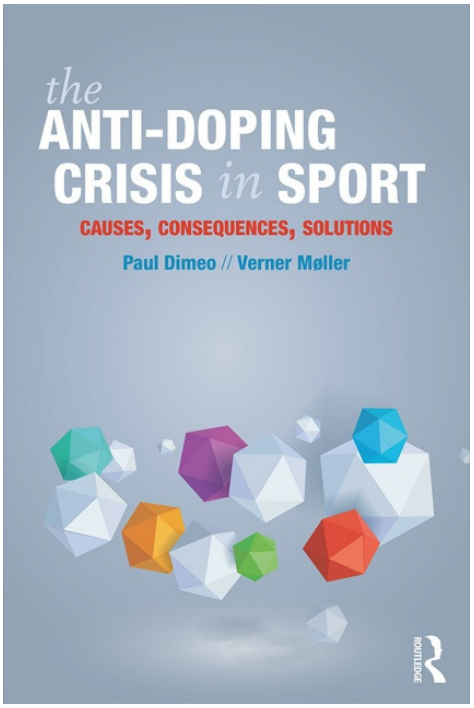
DELTS Doping E-learning Tools

5) Support & collaboration to apply for grants

We encourage HEDN members to approach each other for writing grant proposals. Several members have already done this and have been successful in securing grants. An example is the DELTS Project funded by ERASMUS Sport+. More information will soon be available via www.deltsproject.eu.

Book Discussion: 'The Anti-Doping Crisis in Sport: Causes, Consequences and Solutions'

Interview with Dr Paul Dimeo and Prof Verner Møller



Q: Both of you are eminent scholars in the field of doping research and beyond, with extensive publications records. As such, we are curious to know; what motivated you to write this book? Why now? Why at all?

A: It is true that over the years we both have written quite a lot about various aspects of doping in sports. Our main focus hitherto has been related to athletes' motivation to dope; the concerns that have led governing bodies to oppose doping, the strategies developed to reach the aim of doping free sport and the consequences implemented strategies have had on athletes systemically and individually. The decision to co-write our new book came at the end of a conference organized by the International Network of Doping Research in Aarhus. We were digesting the impulses from the conference over a beer when we began talking about all the many challenges WADA was facing.

It seemed to us that every measure WADA has implemented has done little to help the Agency's course, instead it has produced new problems that makes it more and more clear that the approach that has been used for almost twenty years now has led anti-doping into a cul-de-sac. The organization has lost credibility, its alleged protection of clean athletes has in effect been ineffective and so burdensome that, despite WADA's insistence it has support from the athletes, an increasing number of professional athletes through their unions have complained and called for reform. In light of this we started to consider possible ways forward when the most entrepreneurial of us proposed we wrote a book about it that took us beyond our previous critical stance.

Q: Can you provide readers with some insight into the book? Following from the title, in short, what is the anti-doping crisis and what are some of its causes and consequences? Perhaps more importantly, could you elaborate somewhat on the solutions?

A: The anti-doping crisis is multifaceted and so are the consequences. There is the lack of legal protection of athletes. The introduction of the strict liability rule is logical in that anti-doping would have been economically bankrupt if the authorities should prove a positive test to be a result of intentional doping. However, since almost half of those who are sanctioned are given a reduced sanction because there in some cases are evidence in other at least reasonable doubt that the sanctioned athlete had no intention to dope, it is fair to say that in the pursuit of the good the system has become morally bankrupt. There is also the irresolvable problem with the lack of harmonization.

The Russia case is a stark reminder that countries may pretend to play by the rules while in fact they prioritize producing winners by doping. And there is little WADA can do to prove and sanction non-compliant countries. The improved effectiveness of the test system is paradoxically also adding to

the crisis, as for instance lab tests improved sensitivity increases the risk that innocent athletes are being sanctioned. And these are just the most obvious of the problems.

So, what is needed in order to solve the crisis is a new beginning. We think, it is time to do away with the dogmatic zero tolerance approach. As simple and right as it sounds zero tolerance is fundamentalism and as such anti-doping's equivalent to Saudi Arabian Salafism. It is tough, brutal and unjust. What we suggest is that the incentives to dope is diminished, that anti-doping authorities take more responsibility for the protection of athletes' health, by putting a health care system in place that WADA oversees so athletes are not in the hands of team doctors and external medical agents.

Moreover, we suggest that athletes' education is taken much more seriously. As it is now, what is called anti-doping education is in fact anti-doping propaganda. What we envision is education that plays into athletes' capability to be responsible agents. So, in sum what we are suggesting is a new approach that combines ideas of socialism and liberalism. Thus, without mentioning these figures a single time in the book, our approach is inspired by Marx, Kant and Mill.

Q: How does this research expand our understanding in the field of doping research and of anti-doping more generally?

The book, hopefully, provides an understanding of the seriousness of the damage anti-doping in its current form inflict on athletes and sport as a whole. It demonstrates how anti-doping undermine the meaning of sport. Having said that it also shows that the simplest solution to the problem of doping, legalization, whereby concerns about the cheating aspect and equal terms evaporate, is not a viable solution but that a multifaceted approach is needed if sport as a healthy and meaningful phenomenon shall prevail.

Q: If you wanted readers to take away one key message from the book, what would it be?

That the exiting policy works against the principle and ideals that it is supposed to protect. That this can only be changed if the responsible parties are willing to put prejudice aside in favor of rational thinking based on the pragmatic acceptance of the fact that the reality is not ideal. That ever so hard punishments cannot change that, which is why the only way forward is to change the focus from surveillance to empowerment by preparing athletes to make rational choices and take responsibility for their own life.

Q: What is next for you?

There are plenty of ideas in the drawer waiting to be dusted off. Analyzing how the fight against doping may impact wider society is one of them.

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Q&A: Fredrik Lauritzen, Anti-Doping Norway

I: Antidoping Norway (ANDO) is one of the leading National Anti-Doping Organisations (NADOs) in the world, and like a few other NADO's Antidoping Norway is also responsible for the prevention of doping use outside organised sport.

Q: How did Antidoping Norway's work with the prevention of doping use outside sport come into existence, and how has it developed over time?

FL: The idea of working locally to prevent doping outside sports started in 2006 by a request from a local police station outside Oslo where they had experienced an increase in crime which they linked to doping. They wanted more information about the subject to be able to deal with the problem. A minor grant to Antidoping Norway from the Norwegian Directorate of Health the following year made it possible for us to arrange an educational seminar and establish a local network group on anti-doping there, as well as in three other cities. The concept of a local network group has since been evaluated and adjusted over time. Today, a systematic and comprehensive preventive approach with local ownership is the backbone of ADNO's preventive work on anti-doping in a public health context.

Since 2007, the annual funding from the Norwegian health authorities has increased substantially. This has made it possible for us to recruit personnel both on a permanent and project basis, and develop and run anti-doping programs for- and in collaboration with counties, municipalities, schools, fitness clubs and prisons, as well as to conduct educational activities for university students, teachers, fitness professionals, police, health personnel, parents and many more. In 2017 we held 613 face-to-face presentations for more than 32 000 people throughout the country. About 60% was related to doping and public health.

I: Among both researchers and practitioners there are concerns that doping use in fitness and strength training environments is increasing. For example, it was reported in 2016 that the use of anabolic-androgenic steroids (AAS) in Norway has more than doubled in six years, in particular amongst young people.

Q: What kind of actions does Antidoping Norway undertake to prevent doping use in these environments? And what kind of measures do you think are the most important ones in order to address this issue?

FL: Unfortunately, due to a lack of studies and known methodological issues related to self-representation bias when collecting data through standard questionnaires, there is no clear picture on current doping prevalence in fitness and strength training environments in Norway, nor its development over time.

Existing studies on average report a steady lifetime prevalence around 2-3 %. There is no scientific evidence that the use of AAS have increased substantially over the years, although we (ADNO) and our partners continue to experience an increased interest in the issue, and receive more inquires and concerns from both the fitness centre industry, public officials, and the public.

We do believe that the current prevalence is somewhat higher than research has been able detect, and that this in part may be linked to the sharp increase in social media use in the later years, and a greater interest in strength training, fitness, and a muscular appearance among youth. However, when discussing prevalence, we must also be careful not to make doping use a bigger problem than it really is, as this may induce a “false consensus” situation where doping may be perceived as common by the prospective users, and thus might lower the threshold for using doping among these individuals.

I: The doping substances that have received the most attention both inside and outside the world of elite sport are anabolic-androgenic steroids. But people in fitness and strength training environments also take other human enhancement drugs such as stimulants or metabolic hormones for weight loss purposes.

Q: How do you address the diverse category of ”fitness drugs” that people use to enhance their appearance and/or performance?

FL: ADNO has a comprehensive toolkit with tailor-made preventive measures for different target groups. Information on the wide range of drugs currently used by the fitness crowd is something we provide to some audiences, but not all.

Primary prevention targeted to youth between 15-20 years is the cornerstone of what we do. In this context we speak less about the specific substances that are used and rather focus on social media, group pressure, general consequences of doping, dietary supplements, and clean exercise.

I: As you may know, the use of doping controls among recreational sportspeople (e.g. fitness members) has been criticised for being intrusive and violating citizens’ right to privacy. But it also has been argued that such controls are a necessary means to ensure a healthy training environment (by removing bad ”role models”) in the fitness centres that want a doping free environment.

Q: What is your perspective on this matter? And do you believe that Antidoping Norway is the right organisation to be responsible for testing recreational athletes?

FL: Currently, ADNO may test recreational athletes at fitness centres who have joined our Clean Fitness Centre Program and completed the certification process. In such cases, the club must follow a strict procedure which may end up with ADNO testing the suspected member. The fitness club owns the test results and has the responsibility to take appropriate action if the test result is positive. ADNO is just a service provider.

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As part of the Clean Fitness Centre program, we provide the fitness staff with knowledge and training on signs and symptoms of steroid use, and how they may approach the member and engage in a meaningful discussion with him or her. We also encourage and facilitate co-operation between the fitness clubs and local police.

ADNO conducting doping testing on behalf of the fitness centre is usually the last option. In my opinion, combatting doping in fitness and strength training environments should be based on prevention and on building a clean exercise culture where the exercisers believe they may reach their fitness goals without using doping. Not on testing.

I: Unlike countries such as Denmark and the United States, who banned the possession of anabolic steroids in the 1990s, steroids were legal to buy and use in Norway until 2013.

Q: Did the criminalization of anabolic steroids impact the use and/or supply of these substances in Norway? And has Antidoping Norway changed its approach to prevention in this area since the 2013 ban on steroids?

FL: The criminalisation of anabolic steroids and other doping substances in 2013 was a game changer for our work. Since then, the awareness of doping related to public health, and the government funding to ADNO to prevent this behaviour have increased substantially. My impression is that most people think that when a government ban the use of a substance, it sends a strong signal to the public that this substance is not good for the individual nor the society. I believe this may have a strong deterrent effect. A somewhat restricted availability due to laws and regulations certainly also help in this matter.

I: Interestingly enough, despite the harsher measures concerning anabolic steroids, the Norwegian parliament, following the example of Portugal, has recently voted to decriminalise illicit drug use.

Q: Do you believe that a decriminalisation of steroid possession and use could in any way be beneficial when it comes to the recreational use of these substances?

FL: We have not discussed that yet. On a general basis, I guess there are pros and cons with a decriminalisation like it is with criminalization.

I: Thank you for taking the time to participate in this interview!

FI: Thank you! Keep up the good work!

Fredrik Lauritzen, Anti-Doping Norway

'Let's talk steroids': user's voice

Responsibility as a PIED user

By Bjorn

Performance drug use is a world of grey, sitting on ethical boundaries and skirting the law when required. In countries such as Australia, individual users must cooperate with clandestine labs and shady distributors in order to source most of the PIEDs on the market. Conforming to certain ethical and safety guidelines is not just a recommended course of action for users; rather, it is a moral duty.

Being responsible with personal use is frequently made more difficult than it ought to be by unreasonable legislation and stubborn specialists. Once we make the decision to pursue this path, the onus is on us to ensure we are doing what is reasonable to minimise harm to ourselves and avoid conflict with other aspects of our life. However, monitoring blood results and having regular physical check-ups for heart health involves dealing with a revolving door of specialists who have varying personal stances on PIED use and are at times less than helpful when it comes to doing the bare minimum to help users.

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Compounding this is the questionable attitude held by a large portion of law enforcement and the legislative bodies in power. Dogged pursuit of individual users for possession does little to foster a culture of self-care within the PIED community, especially when it seems none of the pursuers has even a rudimentary understanding of PIEDs, how they work and why people choose to take them. Any individual who outed themselves to advocate for the wellbeing of fellow users is at risk of becoming a martyr, and for little gain. While there still exists such social and legal stigma towards PIED users, the role of advocacy falls heavily on those working in healthcare and academia; to accurately and effectively communicate the ins and outs of use and provide an honest account of the risks involved.

Despite the seemingly futile position that individual users find themselves in, they too have an integral role in advocating for responsible recreational and competitive PIED use free from obscene legal implications. As users, we must not fall prey to blindly defending all use of PIEDs regardless of the context and the methodology. It is our responsibility to self-regulate usage patterns within the community, to promote safe injecting practices, and continue health monitoring and attempt an open dialogue with (hopefully reasonable) medical professionals. We must also condemn irresponsible use of PIEDs, if only for the selfish reason that it damages our perception with the community.

As a community hiding in the shadows of the internet and in the locker rooms of gyms, we are particularly prone to closing ranks and giving up on ever not being ‘the outsiders’. Though we may be frequently maligned in the media, we won’t make any appreciable progress towards a better quality of life without engaging productively with those who have the power to advance our cause.

A short piece on how we can improve support for PIED users

By Adam

I started off at the age of 18 as a steroid user my first course been Dianobol, my main sources of protein were Chicken, steak, turkey and eggs. I was mentored by old school bodybuilders so I relied on old school methods, hard HIT training and basic solid food.

My first course was 6 weeks long and I took the same off. Dianobol as a solo drug is in some ways laughable from the reports of what new steroid users of today are taking. Courses of Tren, with Sustonon, and Test E are not uncommon, topped with Anavar or dianobol, etc. I don't need to go on about the risks involved with taking courses of this magnitude at all - never mind as a novice user.

I moved on to injectable steroids after around 2 years and never really thought I had any problems apart from one. I injected Test suspension into my left shoulder and had to attend the doctors. This is where the first problem lies. Due to the negative attitude that I have experienced with GPs, coupled with the lack of knowledge regarding recreational steroid use, I found myself very withheld from wanting to talk to anybody regarding any issues I may be experiencing. I have found that this attitude among steroid users is still prevalent today; which I experienced first hand working as a health professional myself and trying to give harm reduction advice to steroid users.

Steroid users in some ways are very reluctant to seek advice from anybody at the best of times. I have heard of horror stories with injecting issues and steroid users trying to treat themselves with anti-inflammatory medication or injecting tea tree oil into the infected sight.

With the growing pressure of social media to look good, everybody thinking they are 'an expert', coupled with the limited knowledge of medical professionals, nurses, etc., and even the justice system coming down on users, we finds ourselves adding more pressure as a society on users and leading to them not wanting to seek any professional advice. Plus there is the issue that funding in this area is minimal and actual 'steroid health services' are few and far between.

In my opinion, we need to start at the beginning with educating and training medical professionals and other professionals regarding steroid use. Even with the possibility of tying this in to their studies before they graduate. It is no lie that Britain is facing a possible steroid epidemic and even stats as many as 1 million steroid users been in Britain. You only need to go round the local gyms to witness this.

It seems there are many faults in the ' overall system' and it may only be the beginning as we live in a world of the 'Selfie'. Yet, we seem to be getting more selfish and not giving everybody the same support and education across the board.

"We need to start at the beginning with educating and training medical professionals and other professionals regarding steroid use."

As an ex-steroid user, and now being a health professional, I know all too well the negative impact I have had with sharing my story in a bid to try help others. This will not deter me, as I also have had a lot of positive outcomes regarding delivering harm reduction services and reducing the potential possibilities of health issues in the future.

Researcher Spotlight: Dr Kate Seear

How I got started? Football!

I first became interested in drug policy research about a decade ago, after completing my PhD in health sociology. I had done my PhD on gender and health, but had no background in drugs research. I then received an invitation from a colleague, Professor Suzanne Fraser (now leader of the Social Studies of Addiction Concepts (SSAC) research program in the National Drug Research Institute, Curtin University, Australia) to collaborate on research she was doing on injecting drug use and hepatitis C. I knew nothing about the field but was keen to work with Professor Fraser and jumped at the chance.

This was my first foray into drugs research. The area immediately appealed to me for a few reasons. People who use drugs are some of the most highly stigmatised people in the world. Much of my earlier research was on gender and health, discrimination and stigma, and there were key themes between the two areas. I had also trained as a lawyer and previously represented people understood to be experiencing alcohol or other drug (AOD) problem. Perhaps most importantly, Professor Fraser's invitation to collaborate coincided with an important development in Australian Rules football that had caught my attention. I'd been watching with some interest the unfolding case of Ben Cousins: a high profile and highly accomplished footballer, who media were also reporting was experiencing a drug 'addiction'. In late 2007, as a result of his drug use, the AFL Tribunal suspended Cousins from playing for one year, on the basis that he had 'brought the game into disrepute'. I was intrigued by this development, and wondered why it was that (at that stage unproven allegations of) drug use was sufficient to attract such a sanction.

Importantly, Cousins had been sanctioned in a context where other footballers had been accused of family violence, sexual assault and rape – and yet not attracted such a hefty sanction. Also, I was puzzled by an apparent paradox in the way Cousins' drug use was being publicly described, in that he was being described as suffering from an 'illness' or a 'disease', on the one hand, and yet being sanctioned for it, on the other. All of this piqued my interest in the relationship between drugs and sport, sport tribunal processes and procedural fairness, the seemingly gendered and politicised nature of what comes to be understood as harming the reputation of sport, and more. I developed an ongoing interest in how drug use and 'addiction' are conceptualised – often in ways that are contradictory – across a range of domains, including drug policy and drug law.

"I was puzzled by an apparent paradox in the way Cousins' drug use was being publicly described, in that he was being described as suffering from an 'illness' or a 'disease', on the one hand, and yet being sanctioned for it, on the other."

Next steps in my career? Sport, drugs, law, policy and gender

The combination of these events: the unfolding drama surrounding Cousins, and the invitation to collaborate with Professor Fraser, firmly cemented my interest in drugs research. She and I went on to write two papers about the Cousins case, including one that was based on an in-depth interview with him about his experiences with drug use and sport, and the only time, as far as we are aware, that he cooperated with researchers to share his story. Professor Fraser and I subsequently wrote the world's first full-length social science book on hepatitis C and injecting drug use called Making disease, making citizens: The politics of hepatitis C (published by Ashgate). I continued my work on drug law, drug policy, blood borne viruses and sport, publishing across those domains.

In 2016, five friends and I established The Outer Sanctum, a pioneering all-female podcast, which focuses on the social, cultural, political and legal aspects of Australian Rules Football. This podcast gives me the opportunity to combine my academic interests in sport, drugs, law, policy and gender, and to disseminate academic ideas and research to a large audience.

Current PIED project

In recent years my interests have expanded. I am currently undertaking research into the rise of performance and image enhancing drug (PIED) injecting in Australia. The rise of PIED injecting is of interest to me, not only because it intersects with existing areas of my research interest (sport, hepatitis C, the body, gender, health, policy and law) but also because it is generally an understudied area.

In 2015, I led a national consultation on these issues, and the results were published in a subsequent report. This led to a major study, being funded by the Australian Research Council (DP170100302) that explores opportunities for improving harm reduction among people who inject PIEDs. Our specific focus is on the experiences and needs of men, as they represent the majority of PIED users. The overall aim of our project is to explore the meanings given to PIED injecting, and particularly to gain insights relevant to the prevention of hepatitis C transmission.

You can keep up to date with the research me on Twitter (@Kate_Seear) or via the SSAC project website: https://addictionconcepts.com/

ECR Spotlight: Charlotte Mclean

Setting foot in the gym ...

I first set foot in a bodybuilding (BB) gym back in 2000. I had moved to a new area and, having recently started exercising recreationally, I was keen to find a gym that was close to my place of work. The most convenient turned out to be 'Hard Bodies'. Housed in an unassuming old brick building within a largely residential area, this gym would be my first introduction into the world of BB and one that would begin my journey into BB sub culture that would span more than a decade.

After a few months training at this gym, one girl in particular caught my eye, as I coveted her muscular and lean physique; the cultural ideal that I would eventually adopt as my own. Although I only trained at 'Hard Bodies' for around 12 months before moving away from the area, this relatively short period in my life had quite an impact and changed the trajectory of my career. I left the job I was in to pursue an MSc in exercise and nutrition science, as I was keen to learn more about my newfound pursuit, eventually working in the fitness industry for a period.

The aesthetically orientated sport of bodybuilding is one where the use of both anabolic- androgenic steroids (AAS) and growth hormone (GH) is established. Traditionally a male domain, female participation in the sport has evolved since its introduction in the 1970's, from the thin and toned figures of the early 80s to the more muscular physiques in the later 80s and 90s. Back in 'Hard Bodies' I can vaguely recall overhearing male gym members discussing the use of performance enhancers but it was never something that was suggested to me. At no time did I consider that the female whose body I desired might have been using performance-enhancing drugs (PEDs) to achieve her physique. However female PED use does exist, albeit at lower levels but for similar rationales as males: a desire to increase muscularity and improve body composition.

Indeed, it would be some years later, as I sought to achieve a competition ready physique myself, that the use of PEDs in BB began to become more significant to me. I was both fascinated and at times frustrated by its role in the sport. Although images of hyper muscular females may still be considered deviant in mainstream society (Bunsell, 2010 pp.129), there began to be an increasing emphasis within popular culture on fit, muscular, and lean bodies (Benton and Karazsia, 2015). The fitness competitor was born alongside an increase in the number of female categories in BB. Women were now under more pressure to increase muscularity and improve body composition, seeking validation through competition, all of which may play a role in the initiation of AAS use.

"Back in 'Hard Bodies' I can vaguely recall overhearing male gym members discussing the use of performance enhancers but it was never something that was suggested to me."

Although a path I shied away from personally, I was interested in understanding the journey and experience of others, as well as the influences and motivators involved in the use of these drugs and how the BB subculture affects such decisions. While AAS are manufactured to promote their anabolic characteristics, the androgenic, masculinising effects cannot be completely eradicated. The latter can be most damaging in

females. Menstrual irregularities, clitoral enlargement (Eric et al, 2010) acne, growth of body hair, deepening of the voice, reduction in breast tissue and problems with reproductive function are among the potential side effects of AAS use, some of which may be irreversible. In light of this, these virilising effects are adverse with respect to the female AAS user.

... transforming into a PhD

Embarking on this PhD a few years later allowed me to explore my interests in more depth and provided the potential to gain useful insights to minimize harm and preserve health in this ascetically driven population. By engaging with females bodybuilders, I could also address the paucity of data currently available for this hard to reach and understudied population of PED users.

Currently in write up, my PhD comprised an exploration guided by a number of objectives that sought to determine the nature of PED use; perceptions and attitudes towards use; motivations for use; health effects experienced; and attitudes and perceptions towards medical professionals. It combined ethnography, in depth interviews, and photo elicitation, in order to provide the theory and method that allowed the exploration of PED use within the context of the wider BB culture. By observing, participating and becoming part of a BB community my research sought to identify the specific, yet unquantified needs of female PED users, and forms the first stage in developing unique harm reduction initiatives to ensure the needs of this population are met.

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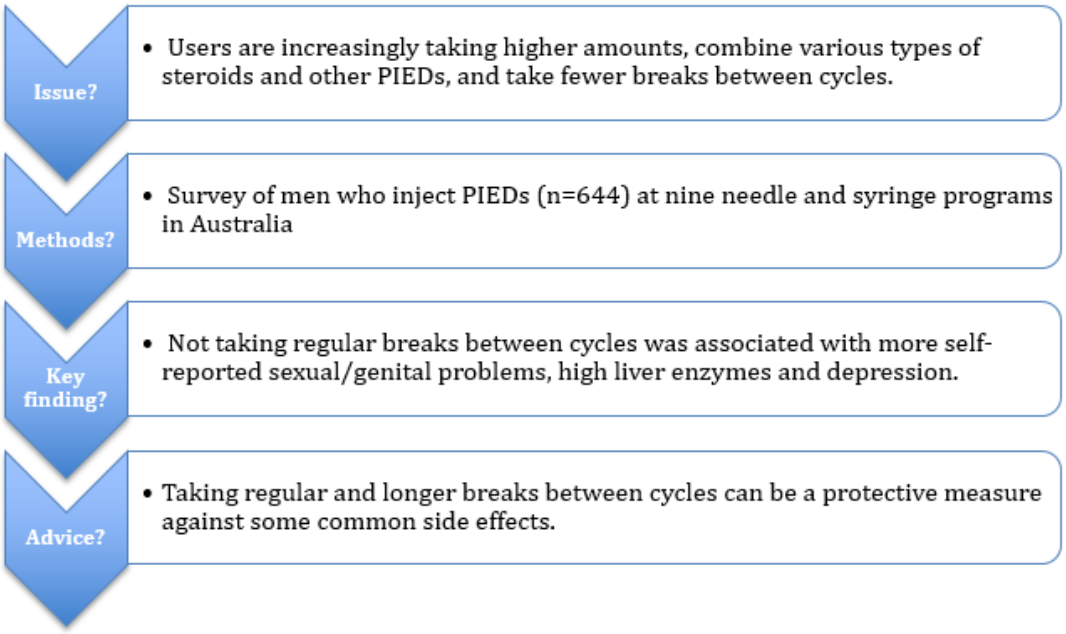
Harm Reduction Tips - For Healthcare Providers

By Dr Katinka van de Ven and Dr Matthew Dunn

An important goal of HEDN is to bridge the gap between researchers and practitioners working in this field. One way of doing this is by translating research into practical application. The practical use of PIED research lies in many different areas: from preventive work to harm reduction and treatment. In this edition we will specifically focus on two recent academic publications in the field of harm reduction and what their 'take home message' is for practitioners.



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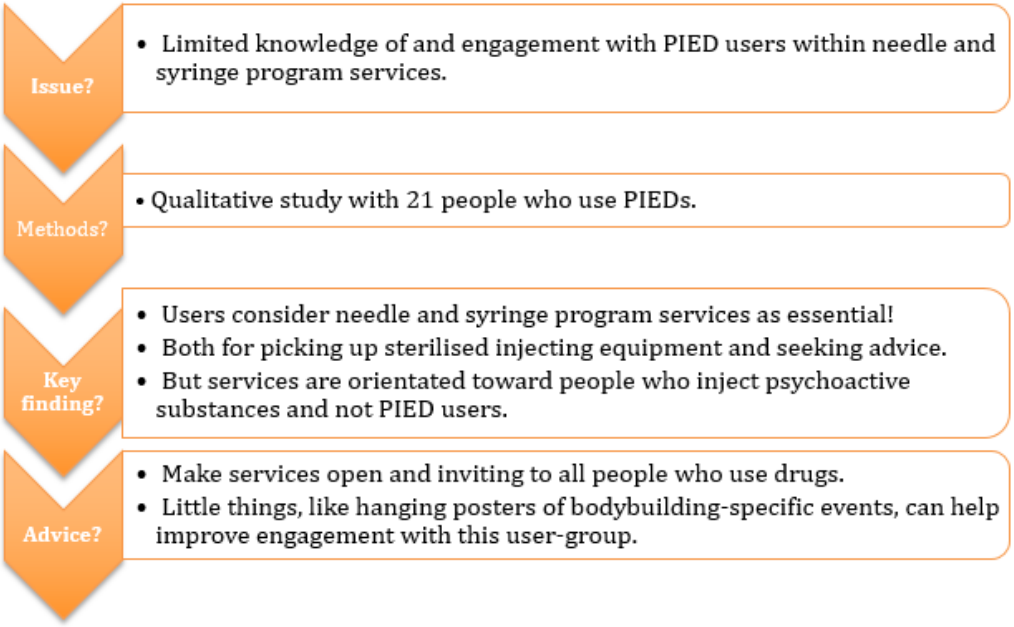

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Harm Reduction Tips - For Users

Quick tips for users by Kay Stanton

Kay Stanton is a Health Education Worker as part of the NSP/Steroid Education Program, Your Community Health. The NSP/Steroid Education Program started as a pilot in 1996 focussed on 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 Kay now operates Victoria-wide and provides consultations and workshops in other states/territories, five days per week.

- Injecting carries several risks, both from the process and from the drugs themselves. It is important to be aware of these risks before attempting to inject any substance -

It would be naive to think that PIED users are not at risk of blood borne viruses (BBVs) and/or side effects. Even though users inject intramuscular, it does not mean that there is no blood loss. In fact at times there can be quite a lot of blood loss and that is where the problem lies. Most of the time, you do not know the private history of the person injecting you. You also do not know if they are carrying a BBV. Try and protect yourself always from blood contaminates. Where possible, always inject yourself. Never share injecting equipment or the vials they come in. Always wash your hands before and after.

More is not better, in terms of dosage, it will just increase the risk of health harms. Steroid use should be kept to 10 to 12 weeks maximum. Staying on long term without any breaks seems to be the trend these days. If anything, it is a sign of body image problems taking over; where you are too frightened to come off because of fear of losing size and strength. It will also in time cause health issues.

Always use new equipment! 19G to draw out with and a 23G to inject with. It is a deep intermuscular shot and the 23g has to go all the way in. Injection sites are the side deltoid, the glute and the quad. Medically these are the safest sites. No more than 2mls should be injected into any one site. Use a different site if you feel you need to have more on the same day. If at any time an injection site gets red and hot and swollen you need to go to the GPs to get a course of antibiotics as you may have an infection.

Always remember everyone reacts differently to steroid cycles. Just because your mate got great results… that does not mean you will! In fact, you could end up with health problems, even though your mate did not.

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Females should in principle never use testosterone as it will likely cause very prominent male characteristics. There are quite a lot of steroids that are too strong for women. Women only need small amounts and using too much for too long will only cause serious health issues. Women should not use steroids if they are or thinking of becoming pregnant as it can cause health problems to their unborn child.

Feel free to contact Kay if you have any steroid-related questions:
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Upcoming Enhancement/Doping Events

Southern harm reduction and drug policy conference
North Carolina, US: April 24-25, 2018
http://www.nchrc.org/news-and-events/news/SHRDP2018

26th Harm Reduction International Conference
Porto, Portugal: April 28-May 1, 2019
https://www.hri.global/contents/1822

Sport Resolutions Annual Conference
London, UK: May 3, 2018
https://www.sportresolutions.co.uk/events/conferences/sport-resolutions-annual-conference-2018

The International Society for the Study of Drug Policy (ISSDP) conference
Vancouver, Canada: May 16-18, 2018
http://www.issdp.org/

2018 NIDA International Forum
San Diego, CA USA: June 8-11, 2018
https://www.drugabuse.gov/international/international-forum

Sport exchange summit 2018
Kansas City, Missouri, US: June 11-12, 2018
https://www.drugfreesport.com/education/sport-exchange-summit/

drogFOKUS conference 2018
Uppsala, Sweden: October 17-18, 2018
http://www.drogfokus.nu/

National Harm Reduction Conference
New Orleans, US: October 18-21, 2018
http://harmreduction.org/conference/

LEPH2018 – The fourth international conference on law enforcement & public health
Toronto, Canada: October 21-24, 2018
https://leph2018toronto.com/

International Drug Policy Reform Conference
Missouri, US: November 6-9, 2019
http://www.reformconference.org/

ICABRT 2019: 21st International Conference on Addiction Behavior and Rehabilitation Therapies
Zurich, Switzerland: January 14-15, 2019
https://waset.org/conference/2019/01/Zurich/ICABRT

Upcoming Enhancement/Doping Events

2018 Alcohol, Other Drug, and Campus Violence Prevention Conference: A NASPA Strategies Conference
Portland, OR USA: January 18-20, 2018
https://www.naspa.org/events/2018scaod

22nd International Council on Alcohol, Drugs and Traffic Safety Conference
Edmonton, Alberta, Canada: August 18-21, 2019
https://t2019.org/

WADA's 5th World Conference on Doping in Sport
Katowice, Poland: November 5-7, 2019
https://www.wada-ama.org/en/events/2019-11/world-conference-on-doping-in-sport

European Drugs Summer School
Lisbon, Portugal: June 25-July 6, 2018
http://www.drugsummerschool.cies.iscte-iul.pt/np4/home

Annual Institute on Addiction Studies
London, Ontario, Canada: July 8-12, 2018
http://www.addictionstudies.ca/

HUMAN ENHANCEMENT DRUGS

www.humanenhancementdrugs.com