Fit for purpose:
The legal, medical and social barriers and enablers to safer PIED injecting

A COLLABORATIVE EVENT CO-HOSTED BY THE AUSTRALIAN RESEARCH CENTRE IN SEX, HEALTH AND SOCIETY, THE SOCIAL STUDIES OF ADDICTION CONCEPTS RESEARCH PROGRAM, AND THE MONASH LAW SCHOOL.

MONASH University

Blood Borne Virus Sector Development Program

LA TROBE UNIVERSITY

Australian Research Centre in Sex, Health and Society

SSAC
SOCIAL STUDIES OF ADDICTION CONCEPTS

NDRI
national drug research institute

Curtin University

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With thanks to all presenters and participants.

2018

Introduction

Consumption of performance and image enhancing drugs (PIEDs) is increasing in Australia and elsewhere, raising questions about health knowledge and needs for those involved. To explore these issues, a forum was held recently in Melbourne. A collaboration between La Trobe University's Australian Research Centre in Sex, Health and Society, Curtin University's Social Studies of Addiction Concepts Research Program, and the Monash University Law School, the forum explored the social, health, legal and other dimension of PIED consumption. Held on Friday February 15, 2018, the event attracted over 100 participants, most of whom attended in person at Monash University's Melbourne city centre Law School premises, while some joined proceedings by webinar.

Key issues the event covered were:

1. gaps in knowledge about PIED use, and needs for further research,
2. the role of NSP workers in helping people who inject PIEDs to access sterile equipment and develop their knowledge of health issues such as blood-borne virus prevention,
3. the challenges GPs and other health providers face in caring for people who consume PIEDs where stigma may impede disclosure, and
4. the place of industry bodies such as those that serve the fitness industry in educating about PIEDs and tackling issues such as unrealistic body ideals that may feed into some PIED use,
5. the general effects of stigma surrounding PIED use and strategies for tackling it.

The day comprised a range of presentations by researchers and stakeholders, as well as a panel discussion and feedback session. Presenters were:

- Dr Andrea Waling, ARCSHS, La Trobe University
- Dr Mair Underwood, University of Queensland
- Dr Aaron Hart, SSAC, National Drug Research Institute, Curtin University
- Dr Patrick Keyzer, Law School, La Trobe University
- Dr Matthew Dunn, Deakin University
- Dr Steven Angelides, ARCSHS, Reader of anonymous lived experience account
- Kay Stanton, Health education worker
- Sally Finn, St Kilda Needle and Syringe Program, Salvation Army
- Dr Beng Eu, Prahran Market Clinic
- Bill Moore, Fitness Australia
- Associate Professor Kate Seear: Monash Law School, discussant

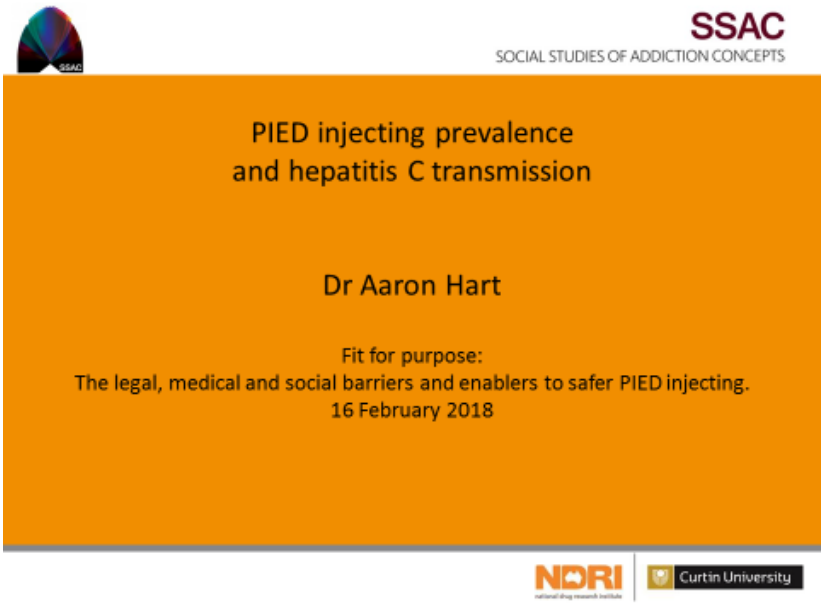
This report comprises the presentations/slideshows for all presenters, as well as summaries of the panel session and general discussion.

The full program for the day:

Time	Presentation	Presenter
10.30 – 10.35	Welcome and Introduction	Professor Suzanne Fraser, SSAC, Curtin University
10.35-10.40	Setting the scene	Dr Aaron Hart, SSAC, Curtin University
10.40 – 11:00	Muscling Up project: Accounts of men contemplating a transition to PIED use	Dr Andrea Waling/ Dr Duane Duncan, ARCSHS, Latrobe University
11.00 – 11.20	PIEDs and recreational bodybuilders	Dr Mair Underwood, University of Queensland
11.20 – 11.40	Projecting the right image: Consuming PIEDs and working in the fitness industry	Dr Aaron Hart, SSAC, Curtin University
11.40 – 12:00	PIEDs: The law and medico-legal considerations	Dr Patrick Keyzer, Latrobe Law School, La Trobe University
12.20-12.40	The health of PIED users: What do they want, where do they want it, and how?	Dr Matthew Dunn, Deakin University
12.45 – 1.25 Lunch		
1.25 – 1.35	The everyday lives of PIED injectors	Anonymous account from a person with lived experience of PIED use
1.35 – 1.50	Steroid Education Project	Kay Stanton, educator
1.50 – 2.05	NSPs and PIEDs	Sally Finn, Salvation Army, St Kilda NSP
2.05 – 2.20	PIEDs and medical encounters	Dr Beng Eu, Prahran Market Clinic
2.20 - 2.35	The fitness industry and PIED use	Bill Moore, Fitness Australia
2.35 – 2.55 afternoon tea		
2.55 – 3.55	Panel discussion	Bill Moore, Kaye Stanton, Beng Eu, Sally Finn, Kay Stanton, Sam Jones
3.55 – 4.25	Group discussion	
4.25 – 4.45	Discussant and close	Associate Professor Kate Seear

Webinar Here is the link to the first two hours of the event:

https://youtu.be/l8grYwbcoKw



Incidence of substances

Most PIEDs studies don't separate substances. Larance et al.'s (**2005**) 'sentinel' (IDRS style) participants (n=60) reported using:

- anabolic androgenic steroids (88%)
- anti-oestrogenic agents (37%)
- beta agonists (clenbuterol) (35%)
- stimulants (ephedrine) (27%)
- other prohormones (20%)
- human chorionic gonadotrophin (15%)
- human growth hormone (15%)
- insulin (12%)

inter alia (p. 36). Method of administration not reported.

Epidemiology

- Research is limited and there are no representative Australian studies.
- PIED use is overwhelmingly among men.
- 0.6% of Australians have ever used PIEDs. Rate has increased by 0.1% triennially since 2007 (NDSHS, AIHW 2017).
- NSP survey: Prevalence of PIEDs injection in NSW remained stable at between 10% and 12% and was ≤3% in all other states. (Memedovic et al. 2017, p. 3)
- In 2016, one in four new initiates (less than 3 years since first injection) reported last injecting PIEDs. (Memedovic et al. 2017, p. 3)

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Outcomes sought and goals for use

- Improved athletic performance
- Doing (masculine) gender
- Increased muscle size and strength
- Exceeding the 'natural' limits of training
- 'Fighting' or 'enhancing' genetic and ethnic characteristics
- Group affiliation
- Looking and feeling good
- Altering appearance of youth and older age
- Pleasure through transgression
- Enhancing sexual attractiveness

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PIEDs and hepatitis C virus

- In Australia, PIED injecting men have a lower rate of BBV infection than other men who inject drugs. This has been partly attributed to a lower rate of receptive needle sharing (Iversen et al. 2013; Day et al. 2008; van Beek and Chronister 2015).
- Between 2013-2016, 0% – 2% of those who reported last injecting PIEDs were HCV antibody+. In 2012, the figure was 5%. (Memedovic et al. 2017)
- HCV antibody+ varies by length of use (e.g. in 2012 NSP survey, 3+ yrs=9%; <3 yrs=2%) (Memedovic et al. 2017 p. 25).

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PIEDs and other health issues

- One study indicated that male athletes who had injected steroids had twice the cardiac mortality and morbidity of counterparts who did not (Thiblin et al., 2015).
- Non-viral liver damage has been associated with steroid use (O'Sullivan et al., 2000)
- low quality substances and poor injection practices are associated with abscesses, bacterial infection and acute reactions (e.g. fever) (Coomber et al., 2014; Dennington et al., 2008 p. 43)
- Gynecomastia
- Testicular atrophy

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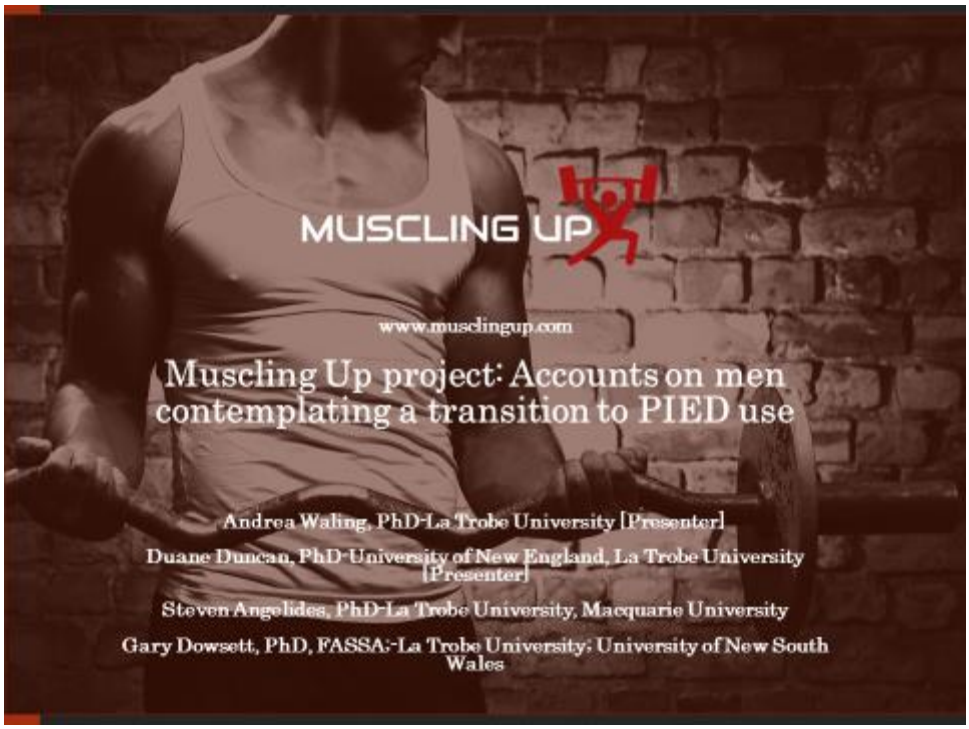
Session one: Research

Dr Andrea Waling | La Trobe University



Risk

No, **they're not scientifically valid, they haven't been proven to increase testosterone**....the way people do it now is either online through websites and that's through pharmaceutical companies and a lot of those ones are like fake anyway, or you can get them from like the bikies and stuff and those ones **you're not sure it's even 100 milligrams of testosterone and that's what you're getting... So yeah I don't think there's safe products that can be certified to say that's what they have**

-**Owen, 25, Student**

But **I'm more worried about the long term effects**, and also rather than having a great body and being able to get any girl, and then not being able to use it because you've got a low libido and your natural testosterone level is shot – **I'd rather be natural and have a healthy libido you know. I'm worried about damaging my natural testosterone levels and yeah side effects**

-**Harry, 32, Legal**

Cheating/Excessive/Superficial

But I felt like he was, you're cheating dude, you know you're using all this junk to look amazing, yes you do but you're cheating... and I think [it's] two faced...

-**Andrew, 35, Student**

It's just - it looks more like **aggressive**. It sort of fits the stereotype of guys who just go to the gym, and just have a lot of protein, a lot of creatine, maybe **steroids**, and they just **constantly build up muscle and the have shitty sort of diets that focus on muscle gain, rather than looking after their body... Whereas if you look at guys who have controlled definition and slim, like lean muscle, they are most likely going to the gym for a purpose**... that's what I like, having a purpose for each muscle.

-**Ian, 40, Project Management**

Natural vs. Unnatural

I look at them and I can go well yeah you've clearly been supplementing, **because they've just got very unnatural physiques… you know very small guys lifting humungous weights**, it's a very good chance they're on steroids.

-**Julian, 26, Public Service**

Well I take the basic supplements but nothing, **there's definitely a threshold where it's like okay no you're treading into territory which is absolutely too synthetic, you cannot be touching that**. My dad's a pharmacist and I've got a lot of knowledge on performance enhancing drugs because I've studied them. But no, **stick with the basics, I think I can get, I think I can reach a really, really good level naturally**.

-**Lewis, 20, Student**

'Pathways,' Tensions & Possibilities

- How men discuss the possibility, or the potential, to start using PIEDs
- How men negotiate the risks and stigma that accompany PIEDs use

Supplements-Blurring of Natural/Unnatural

I feel like **protein powder, which is clearly a supplement, is entirely a different category of things to like say steroids**... but obviously people get into it a whole lot more, **like they have the whole you know supplement stack or whatever, and it's like protein and Creatine**, I've got a friend who really gets into that and I can sort of imagine myself getting into it...

Ned, 31, Student

Natural testosterone? Is there such a thing? No, okay if that was a thing, yeah sure, **like if it was like natural, but if it's not natural then no... I have taken a** supplement that gives you the **precursors for testosterone, so that was Fenugreek** and stuff like that, mixed together, **but it had no effect,** and I was just like okay I might as well just be not taking this, **surely you'd notice some changes**

-Pawan, 24, Corporate

Supplements-Knowing What Works

I'd go to a supplement store and I'd say hey I understand that I can **buy natural testosterone, herbal genic testosterone** or whatever is it, something or other. And the guy is like yeah, yeah you know we've got the tube right here **but this stuff works a lot better**, you know **so it's like legal drugs really**. So yeah, I tried **synthetic testosterone**... but **did I ever consider about using needles and pills and all those kinds of things, no I wasn't that stupid**.

-Andrew, 35, Student

Why? Because it works, there's no doubt about it, **so there's no better way to gain muscle mass than take some steroids** or some other androgyn.

-Marcus, 32, Public Service

If Everyone Else Is Doing It…

I have just **done a lot of research** myself, because **I've seen so many guys in the gym that have done it**, and being honest with you, **I've thought about it**, I've thought like, **maybe I should just take steroids and be like the same**.

-Connor, 30, Professional

Especially like that indulgence in the fitness industry, and now steroids and things have become so prevalent… **it's kind of rare to find someone that hasn't taken steroids that has a kind of physique** that's easy on the eye.

-Derek, 30, Corporate

Dis/Advantage

…well the thing is like **that kind of makes me jealous**, like you see someone that's never gone to the gym, or like they'd go – for example I've got **another friend** that basically was like me, he was going to the gym for years and **he had an average kind of decent body, probably about how I look like, and then 3 months later he was looking basically he'd achieved my dream body right**, from doing a 10 week or 12 week cycle and I was like shit it's that easy.

-Harry, 32, Legal

… the **guys that are on the 'roids, they act like they are top shit**. And the thing is, sometimes I just want to say to them like, **"you're on 'roids dude, you got nothing to be proud about"**, do you know what I mean? 'Cos you get pretty shitty because they are lifting heavy weights. And **then there is these young kids looking at them like, "wow that guy is so strong"**, and **then there is someone else next to them that's natural and still lifting heavy but they get overlooked**.

-Connor, 30, Professional

PIEDs as Inevitable

The trouble is **you get to a point where you're not really *progressing*** and you know all these guys you see around with their shirts off and you've been going long enough, you go yeah **they're all taking steroids, and I'm not, and you know** I've not been progressing, there's been times where it's been tempting and **I think anybody who's sort of regular at the gym probably does [think about it]**

-**Nathan, 43, Unemployed**

So I'm about 60 kilos of lean body mass at the moment. I'd like to gain about – I don't know, it's hard to say. **'Cos at the moment I'm thinking of, because of the lack of results, I'm thinking of taking steroids.** Yeah that's been on my mind.... **Just to kick start my results again and *that will motivate me more.***

-**Ethan, 18, Student**

Medicalised Hormones

...like **you can do cycles of hormone replacement therapy that you can go to your GP** if you've got – like **I've got mates that do it**, they get dodgy GPs that sign off that **they've got low natural testosterone and growth hormone** and they go to their GP and they get pharmaceutical grade testosterone injected into their arse once a week... **I've contemplated going down that pathway**.

-**Derek, 30, Corporate**

I don't have any interest in... playing with hormones sort of thing, like I believe that **there's a lot of negative side effects** that just don't warrant actually going down that path. [But] I think that given my age I'm... in the final years of plateauing bone mineral density and still having a normal kind of boost of testosterone, **so I don't see that as something that I would be without or needing to supplement at this stage.**

-**Jack, Medical, 25**

Educated Use

…**people who don't understand it** and **don't have the discipline** to kind of really follow through on the physiology side of it would **end up with really terrible side effects like abdominal fat distribution**, or all these **horrible things**… I think **it works well for** some **people** because they can really be **disciplined** in how to **harness the potential of it** and harness the, or **appreciate the risks of it** and **work through the side effects**.

-Jack, Medical, 25

…**If steroids were more readily available I would do them**, like if **they were legal** and **I could see a doctor and he could tell me what the go is with them and how to safely do them** and I knew what I was getting and I could have a very like low dose, just so I didn't have to eat as much protein and stuff and I could metabolise a lot easier, I probably would.

-Owen, 25, Student

Discussion & Conclusion

- Risky to health (& therefore irrational), an unfair advantage, unnatural
- How men may re-signify the risks and stigma of PIED use to facilitate their transition from non-users to consumers:
  - Progress and improvement – the logic of weight training means PIEDs are experimented with and evaluated according to their effectiveness, and ideas of health, rather than side effects
  - Their purported availability and 'visibility' mean they are proximate as choices
  - Rather than cheating, silence about PIED use and comparison between men fosters feelings of disadvantage among non-users
  - Education, technical management and control are strategies men develop to ameliorate the risks and stigma
  - The medicalisation of male hormones blurs the natural/synthetic boundary, legitimising hormonal intervention

Acknowledgements

- Participants
- ARC Discovery Grant
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- Wendy Heywood, focus group assistance

‘I don’t want to be labelled as some irresponsible, disease infected junkie’ Enhanced bodybuilders’ perspectives on the place of BBV in PIED research and healthcare provision

Mair Underwood, School of Social Science, The University of Queensland

Why conduct this study?

- Health promotion messages can have unintended consequences
- Health promotion messages must tap into an “existing corpus of meaning, fitting into a self-image already at least partially formed” (Lawton 2002:729).
- Today, I will describe the existing meanings of BBV and suggest how they might inform the reception of health promotion efforts.

Methods

- 3 year ethnography (primarily online) of recreational bodybuilding
- Today = 1 year focussing on PIED risks and harm minimisation from the enhanced bodybuilders perspective.
- participant observation online and building my body offline.
- Interviewed:
  - 22 recreational bodybuilders who have or are currently using PIEDs
    - Age range 21-54 (average 31)
    - 1-15 years use, doses = 500mg – 3+ grams per week.
    - Education: junior certificate - PhD in Biochemistry.
    - 55% Australian, 24% USA, and 1 each from UK, Canada, Belgium and Germany.
  - 5 international experts who advise PWIPIEDs on harm reduction.
- Interviews conducted face-to-face, phone or Zoom → ongoing contact

BBVs as a relatively insignificant issue

- Only one participant (who provides clean injecting equipment) mentioned BBVs when asked about the risks of PIED use.
- All other participants listed many risks of PIED use but not BBVs.
- BBVs rarely (if ever) discussed in forums, and then only to seek advice re using when already contracted BBV by other means.
- The majority of participants described BBVs as 'not a concern' or as a 'non-issue'.

BBVs as insignificant because …

- Use sterile equipment and sterile practice:
  - *use clean every time and always sterile* [Neil].
  - *majority users wouldnt even trust if they saw u open the needle package but rather open it themselves to be sure its a new one* [Joel]
- Typically don't use with others:
  - *It just seems like such a 'group' problem and my journey is a solitary one* [Tony].
- No needle sharing:
  - *I don't share needles with anyone nor do I reuse them on myself* [James].
  - *No one shares needles in the community. Even the really dumb kids who "learned" from YouTube guys get that needles range from free to almost free* [Ian].
  - *are you referring to the sharing of needles? Cos that sh*t is wack as f**k junkie territory and I have never ever thought about sharing a needle or reusing a needle, even one of my own* [Dave].
- Informed by little or no desperation to use the drugs:
  - *If I didn't have any sharps for some reason I'd just order more/walk to the chemist and hope they aren't c**ts. Worst case miss a week of pins while shipped and just do a double shot* [Bjorn].
  - *if i was out of clean needles for steroids id wait a day to get more, give me 8mg dilaudid and i wouldnt care what i used (as long as it was mine) the desperation factor isnt there which mitigates alot of risk or risky injection practices* [Jack].

Injecting risks that they are more concerned about:

- Poor injection technique
- Abscess
- Bacterial infection
- Post-injection pain
  - *But no life threatening ordeals just a pain in the ass literally lol* [Sebastian].
- *bbvs are very high risk but very low probability, users care about whats most likely to happen every time they inject even if the consequences are low as opposed to what could cause death but may happen once in a billion shots* [Jack].

Long-term health risks are of the highest concern:

- Heart health
- Cholesterol
- Liver function
- Blood pressure
- Hematrocrit

	Benefit	Maybe perceived as either harm or benefit	Harms (actual or potential)	Harm minimisation strategies
Physical	Tailoring of body Consistent appearance Shredded body at younger age/sexual peak Going beyond natural limit. Allows some leniency in diet and exercise	Suppression of fertility.	Hematocrit increases. Blood pressure. Testicular atrophy. Cardio health e.g. 'left ventricular hypertrophy'. 'Reduction in oxidative stamina'. Cholesterol. Hormone imbalances. Gynecomastia.	Giving blood/ draining blood into sink. Freezing sperm. Cardio day. Regular testing of: Blood pressure, white and red blood cell counts, hormone levels, liver function, hematocrit, PSA, Cholesterol (LDL to HDL. Take: Aromatase Inhibitors, Clomid, HCG, Vitamins, Fish oil, Paracetamol, Moderate/ conservative doses of PIEDs, Certain compounds (e.g. Deca only, always use base of test).
Mental/ emotional	Improved mood. 'Euphoria'. 'Roid happiness'.	Aggression: focused aggression = benefit, generalized aggression = harm.	Reduced mental clarity. Anxiety. Depression. Reduced patience. Increased ego.	Avoidance of certain compounds. Mentally preparing self for interactions with others so as not to react before thinking.

	Benefit	Maybe perceived as either harm or benefit	Harms (actual or potential)	Harm minimisation strategies
Social	Confidence: 'It's like I'm injecting confidence'. Respect. Social standing. Being 'alpha'.		Stigma: 'it's like being a pedophile'. Scaring/ intimidating people.	Hiding body with clothes, changing posture to reduce appearance of size. Privacy/secrecy.
Sexual/ Romantic	'Sex is better'.	Increased libido. 'Animalistic sex'. Sexual aggressiveness and assertiveness 'Kinky sex'	'Emotional coldness'/lack of connection. Changes to sexual preference/behaviour: - Becoming bisexual. - f**king trannies'	Avoidance of certain compounds.
Occupational	Confidence ('I took Dbol for job interviews'. Respect.		Discovery/criminal conviction leading to loss of job. ('I was paying $500 in tax per week, now I'm on benefits').	Secrecy. Scheduling use around work trips.

Why is there a focus on BBV?

1. Overstatement of risk:
   - *The fact is, even in published data, BBV rates are low. I've read reviews that unsafe injection techniques are typically low with regard to BBV such as sharing needles, sharing vials and reusing needles* [Mason].
2. Ignorance with regards the actual practice of PIED injecting:
   - *I feel as though most of the attention that BBVs receive from healthcare workers comes from a lack of understanding of how people actually use PEDs; that is there is little to no social aspect involved with injectable PED use and that most users follow a sterile injection procedure* [Bjorn].
3. Ignorance of the range of risks:
   - *I find it frustrating as services focus on an irrelevant issue instead of getting their heads out of their collective arses and dealing with the real issues. They don't have the knowledge to tackle the problems so avoid them. … the depth and complexity of the subject scares them so they avoid it* [Sean].
4. Generalising across all PWID:
   - *they put PIED users in the drug addiction corner. Bc of the negative media coverage and the straight out lies that have been told to the public and even to medical professionals they view PIED in the same category as heroin, coke, meth and other drugs. Therefore they expect the same risk factor* [Tom].
   - *Its funny too because, bodybuilders/aas users are actually the complete opposite of a junkie, we take care to dress well, eat well, smell good, shave, do regular health check up, bloodwork, exercise, and most of all we are all usually very self motivated driven people, and many if not most of us having an ocd trait of always wanting perfection or at least bettering ourselves in every possible way, so the fact we are labelled somewhat as junkies is so far from the truth* [Sebastian].

The consequences of a focus on BBVs

1. Ineffective services:
   - *This* [misdirected focus on BBV] *is one of the big reasons why services are ineffective. Also it puts users off engagement when the are bombarded with irrelevant information but relevant information is not available due to a lack of knowledge* [Sean].
2. Exacerbates existing divides between bodybuilders on the one hand and healthcare workers and academics on the other:
   - *As with most things related to healthcare professionals and general academic approach to PEDs, it is a little demotivating to constantly have a disconnect between my reality and the assumed risks involved with use of PEDs* [Bjorn].
   - *I'd say it* [the divide] *has lessened. TRT/HRT wasn't even on the radar 15 or 20 years ago, now it's fairly mainstream, at least in the US. Guys now are much more likely to go to the doc to get blood work, and that was never done in the past. … If I heard a doctor harping on this* [BBV], *I'd roll my eyes, and anything he said after that would be suspect* [Wally].

A suggested alternative course of action

- *There are problems with AAS use, but BBV's are quite low on that list. Infection due to improper injection techniques seem to be more widespread. Australia is refocusing on drug reform and, with that, harm reduction. They could have a bigger impact on harm reduction through focusing on infection overall than BBV in particular, the latter would likely improve by default* [Mason].
- All participants suggested a focus on the risks that mattered to them, that were much more likely to eventuate than BBV, and which had the potential to be just as serious, or even more serious, than BBV.

Conclusion

- Enhanced recreational bodybuilders actively work to minimize the harms of their use.
- They are not risk-takers who have no concern for their health and who are ignorant of BBV risk.
- Limitations:
  - small sample
  - may not be representative of the entire community.
  - I am certain that there are other enhanced bodybuilders who take greater risks, and are less well-informed.
- Research participants:
  - well-educated and middle-class (as are most PWIPIEDS).
  - participated because they understand the benefits of research.
- By focusing on BBV we may minimize the effectiveness of harm minimisation strategies and exacerbate existing divides that currently prevent many enhanced bodybuilders from seeking help and from contributing to research.
- We need to listen to the concerns of enhanced bodybuilders when we strive to reduce the harms of PIED use.

Dr Aaron Hart | Curtin University

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Projecting the right image:
Consuming PIEDs and working in the fitness industry

Dr Aaron Hart

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16 February 2018

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Overview of the project

Method

- In-depth semi-structured interviews with 20 PIED using men in each of three states: Victoria, New South Wales and Queensland. We will recruit for variation between urban, regional and rural; sexuality; age; ethnic diversity; and socioeconomic background: Total 60 interviews;
- Semi-structured interviews with a total of 20 health professionals across Victoria, New South Wales and Queensland. Recruitment will include general practitioners, pharmacists, sports science doctors, NSP workers and other relevant professionals from urban, regional and rural areas: Total 20 interviews;
- A publicly available website intended as a clearinghouse of information and resources for researchers, interested health professionals and government personnel. It will offer project findings, other relevant research, opportunities to comment on PIED use, and links to policy and treatment services.

Anticipated outcomes

- New knowledge about the meanings and practices of PIED injecting, and opportunities for health education;
- Targeted recommendations for PIED-related hepatitis C prevention education and other health information;
- A publicly accessible research website offering project findings, other relevant research, opportunities to comment on PIED use, and links to policy and treatment services;
- Increased capacity of the Australian health workforce to respond to PIED use.

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Progress to date

Ethics Approval: Curtin HREC approval number HRE2017-0372

Participants to date:

PIED consumers	32		**Practitioners**	**6**
Urban	27		GP	1
Regional/rural	5		Pharmacist	0
=<25 years	7		Sports science doctor	2
=>26 years	25		NSP worker	3
Gay / MSM	6		Other practitioner	0
Heterosexual	25		Urban	5
CALD	5		Regional/rural	1
non-CALD	25			

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Harm reduction in the fitness industry (FI): What can we learn from FI workers ?

'Bodybuilders make money by acting as trainers to pencil necks' (Klein, 1993).
After we noticed an over-representation of fitness industry workers, we wanted to understand more about the links.

Background

- Workers: 6/19 Vic PIED consumers; 1/3 NSW PIED consumers
- Patrons: 18/19 Vic PIED consumers; 3/3 NSW PIED consumers
- No harm reduction efforts at present, but well placed for impact.
- Understanding interrelations between the industry and PIED use might help inform future harm reduction initiatives.

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Harm reduction in the fitness industry: What can we learn from workers ?

- Aim: to inform future harm reduction initiatives within the fitness industry
- Participants and method: analysed 7 transcripts to understand dynamics of connection between fitness industry work and PIED use
- Results: Harm reduction initiatives would encounter three dynamics:
  - Goals championed by the industry have much in common with effects attributed to PIEDs
  - Pleasures, costs of cessation and diminishing options keep fitness industry workers using PIEDs
  - Prohibition and stigma prevent dialogue

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Participants and method

Urban	7
Regional/rural	0
=<25 years	1
=>26 years	6
Gay / MSM	1
hetero	6
CALD	1
non-CALD	6
Vic	6
NSW	1
PWID ≠PIEDS	3

- 7 fitness industry-employed PIED consuming men aged between 23 and 50 (mean=36.5 years)
- did not specifically recruit fitness industry workers
- coded transcripts using framework developed with advisory board for broader study

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Fitness goals / PIED effects: Mutually reinforcing and entwined

Some sought 'natural' (fitness club) bodies:

'lean body muscle-mass with low body fat and definition.'

Paul, Vic, 50

Some participated in strength sports (niche gym), seeking strong bodies, measured quantitatively:

'in my sport, if the numbers aren't changing, you know the performance isn't getting better.'

Simon, Vic, 32

NDRI national drug research institute | Curtin University

The fitness industry employs exemplary bodies

'Natural' bodies in fitness clubs:

'It attracts members to train with me. They want to look like that, they want that sort of look. They're obviously going to train with me [...] I'm after the natural look of a big natural bodybuilder.'

Craig, Vic, 37 years

Strong bodies in niche gyms:

'I was extremely well known in this industry for a while and I just got known in bodybuilding and then I got known in [strength competition], just because of my size and what I do, everyone just came to know me.'

Matthew, Vic, 26 years

NDRI national drug research institute | Curtin University

Workers have reasons to continue PIED use

Pleasure:

'Every male wants to have that alpha, they want to feel alpha. Steroids do that, they do do that, to an extent.'

Matthew, Vic, 26 years

'Testosterone does make you feel more positive […] it's definitely the look, the better performance, the better physique that boosts my, yeah, self-esteem.'

Craig, Vic, 37 years

'The gym is one place where I feel as though I can do really well and I do succeed.'

Ben, Vic, 44 years

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Workers have reasons to continue PIED use

Effects attributed to cessation:

'When I'm not on a cycle… [I] get to a point where I just feel smaller again.'

Ben, Vic, 44 years

'People who are low on testosterone, they feel like crap, they feel depressed, they feel dead, especially males.'

Matthew, Vic, 26 years

'when you're on a course, you don't get sore… [and when you're not] more than three hours' worth of group classes a week and you'll burn out.'

Craig, Vic, 37 years

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Workers have reasons to continue PIED use

PIED-affected bodies ill-suited to some other roles.

'Where I was working [outside the industry], I got drug tested and I lost my job because of it, so that's a huge consequence.'

Paul, Vic, 50 years

'I've had people cross the street, I've had women cross the street with their children and then cross back behind me.'

Matthew, Vic, 26 years

'I'm working in hospitality… [businesses] prefer not to work with me sometimes, because I don't have that look that they want.'

Tibor, NSW, 23 years

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Prohibition and stigma prevent dialogue

Operators concerned that acknowledging PIED use may incur responsibility.

We asked 10 Vic gyms for recruitment help. Only one, a municipal fitness centre, agreed to display our flyer.

'If people are coming in to use the gym, there's a chance that they might be using stuff, but the gym owners and the gym itself as a business or as a company is completely removed from that. So, I suppose the reason I bring that up is any display of safe use of sharps or blood-borne disease, that sort of thing, would kind of contradict that in a sense, yeah.'

Simon, Vic, 32 years

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Prohibition and stigma prevent dialogue about PIEDs

PIED use stigmatised. Fitness industry-employed consumers careful about disclosure.

'For a little while, I felt like I was cheating.'

Steve, Vic, 39 years

'But you still are a drug user, it's just a different form, that's all… Once someone asks you [if you are using PIEDs] and you go, "no", it's a bit hard to say then, "By the way…," so you've got to stick with whatever storyline you've gone with.'

Paul, Vic, 50 years

'I go for management roles and stuff like that, so yeah, they need to know that I'm not doing illegal things really.'

Craig, Vic, 37 years

'I just hope one day that it can be recognised as just a necessary evil for certain people to succeed in their endeavours and not as a nasty drug.'

Matthew, Vic, 26 years

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Harm reduction initiatives would encounter three dynamics

- Goals championed by the fitness industry have much in common with effects attributed to PIEDs,
- Pleasures, costs of cessation and diminishing options keep FI workers using PIEDs,
- Prohibition and stigma prevent dialogue.

These results pose three questions:

- Are there opportunities to support the fitness industry in fostering more open dialogue about PIED use among its staff and patrons?
- Are there opportunities for the fitness industry, health researchers and services to work together?
- Are there opportunities to reduce the stigma around PIED use?

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Acknowledgements

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- Jake Archer for assistance with recruitment
- Interstate interviewers: Dr Mair Underwood, Dr Jeanne Ellard

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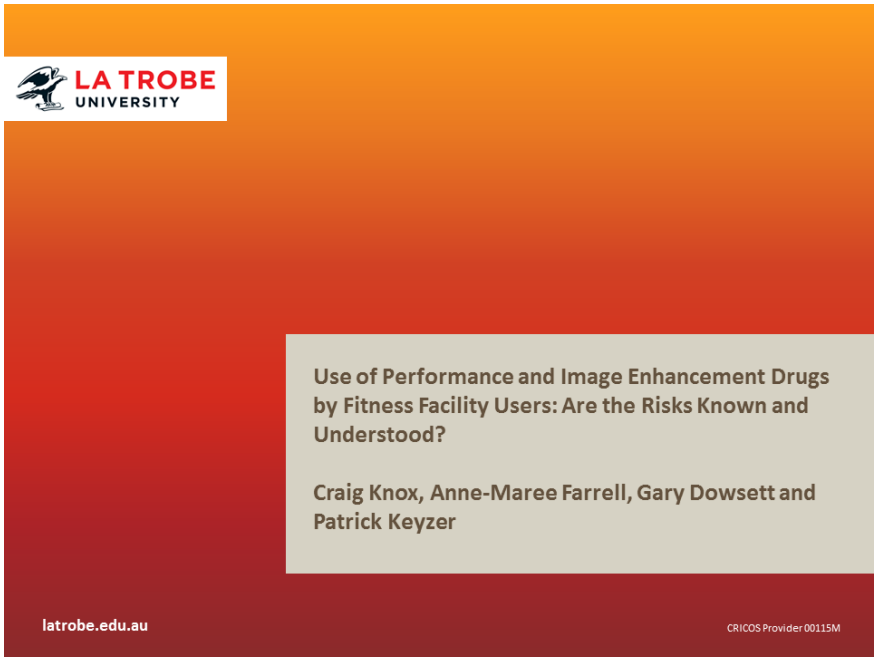
Dr Patrick Keyzer | La Trobe University



Use of Performance and Image Enhancement Drugs by Fitness Facility Users: Are the Risks Known and Understood?

Thirty-one (31) telephone interviews were conducted with fitness facility managers/administrators to explore the context of PIED use, and to determine whether the associated health and legal risks are known and understood.

Interviews were semi-structured (question topics are slide headers in this pack).

Participants had five to thirty years' experience in the industry.

Funding was provided by the Sport, Exercise and Rehabilitation Research Focus Area at La Trobe University.

Awareness of use

'I have been aware of PIEDs use forever'

'I am certainly aware of usage of PIEDs. Not aware of the personal details, but just a general awareness that it happens'

'They want to get bigger and their growth is quite rapid. It is absolutely a more aggressive mood. You know when to stay away.'

'Men who use PIEDs tend to give off an odour when they start to work out and sweat. Also, physically they develop a lot of pimples and you can see them on their back.'

Awareness of use

'In some gyms … 80% of members would use supplements, 20-30% would use Human Growth Hormone and 2-3% would use steroids'

'I think usage is still mainly facility driven. The heavy lifting gyms that are plate loaded, with aggressive colours, larger people using and less seniors.'

'Also now, 24 hour clubs have a reputation as being where people train and do their performance enhancing stuff'.

'There aren't many centres where you don't see clients using PIEDs'

Has PIED use in fitness facilities become more prevalent?

'There has been a rise in bodybuilding more recently. Young people want to be like them and so they'll try anything and everything. I definitely think use of PIEDs has increased over the years, definitely'.

'We've got young kids talking about it, 18 year olds. It's pretty common knowledge that many young kids are on it.'

'Females aged from late teens to early forties are now jumping on board as well'

'Social media has had an absolutely huge impact on use. This has helped to normalize it, without a real understanding of what the long term side effects are going to be.'

How do fitness facility members access PIEDs?

'People access PIEDs through friends of friends, it's something that's a bit hush hush.'

'Access is very easy, you can jump online to get the drugs very easily'.

'One disturbing thing I have noticed in the bodybuilding and fitness industry is that the coaches will sell them to their client.'

'On the gym floor you get personal trainers doing it as well, which is a bit of a worry'.

Are users aware of the associated risks?

'People are unaware of the risks. Especially the younger kids, have no idea of the consequences, the legal implications, nothing, they have no idea.'

'Users are looking for an edge, so they would have an awareness of health risk at some level. Younger people may also feel indestructible and not think about the health risks as much.'

'There may now be more detailed knowledge of the risks but this isn't enough to discourage those who are using.'

Are users aware of the associated risks?

'People are aware that use is detrimental to health in the long term, but with all of the information available on the internet, peer reviewed, logical or not there would be a percentage of people who would assume that they could do it short term, safely and do those sorts of things because of the things they have read.'

Are fitness managers/administrators aware of the risks?

'I think the knowledge and awareness of facility managers is moderate. Most gym staff and managers would have an understanding of the negative effects of using any steroid. But no more than initial training would allow.'

'Facility managers would consider the reputational risk for the business and also health and safety risk, for example syringe use.'

'As a manager, I think I'm not as aware of the risks as I should be. I've never dealt in it, never tried it, I have no idea. We have two other managers at two of our other centres and we wouldn't have a clue really'

How does supplement use relate to the use of PIEDs?

'Supplements are becoming a huge market and easy to purchase online'

'What I find intriguing is the supplement industry, and the compound products that seem to be mimicking the steroids. How far do they keep going to get closer to the steroids?'

'There are some pre workout supplements that are a bit weird, some having lines of speed in it, to train harder. I'm not sure about the testosterone tablets, I'm not sure how they work.'

How does supplement use relate to the use of PIEDs?

'There is no awareness at all of health risk associated with supplement use.'

'I think there probably is a strong correlation between early supplement use and steroid use. Not a causal link but most people who are using HGH approaches would have started on proteins, creatine and amino acids. Probably a linear approach of starting on something, not getting results and wanting more.'

What are the information and education needs of PIEDs users and fitness facility managers and staff?

'Ongoing training and education would be valuable. There is probably a void for trainers and managers in the conversation skills around this area. Not many would be confident in their skill to have a deep conversation with somebody about what they are using outside of the gym, how their mental health is, how their overall health is. Training as to how to deal with the issue in your club is needed, inclusive of referral skills.'

'It needs to be a multi-prong education program, not education that only outlines the dangers and advises not to do it.'

What are the information and education needs of PIEDs users and fitness facility managers and staff?

'There needs to be more education on PIEDs and associated risk management processes. There is not a lot of this at present in fitness or exercise science qualifications currently – or for the general public either.'

'There is definitely a need for education in the area. We don't do seminars here on it. To have risk management information on hand would be beneficial. I just don't know where you would look to get flyers, but it would be good to put out.'

Is there any work going on in the industry around knowledge of the risks associated with PIEDs?

'There is no industry position in relation to risk of PIEDs. It would be beneficial to have information or a statement that can assist businesses and create awareness.'

'I think the struggle with policy, advocacy and awareness of health risk in blunt terms relates to the fact that people often don't care. An awareness campaign may be effective for some, but it probably isn't addressing the underlying issue which is the short term view that people take.'

'I think there is a need for a clean-up of the fitness industry. It's not governed, it's not regulated. I think it's got to come from the government somehow. As it is unregulated, people feel as though they can do whatever they like.'

Is there any work going on in the industry around knowledge of the risks associated with PIEDs?

'What it has highlighted to me was that I need to find out what our policies are. Do we have any related policies? We need to have a national policy. But it will be challenging. We don't want to alienate them, we want to help these people.'

'It's actually stirred up some emotions as to why no-one has done much about it. People are going down to these supplement stores and buying these heavy duty pre-workouts and they are sold to absolutely anyone, regardless of understanding your health risk or age or anything. It's actually quite frightening.'

Dr Matthew Dunn | Deakin University

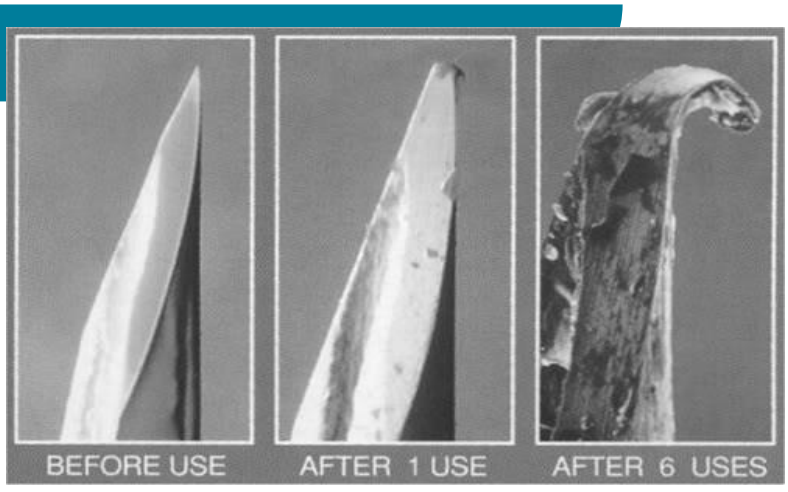
Work with people who use PIEDs to understand their health needs and concerns, not at them

Deakin University CRICOS Provider Code: 00113B

What do we as health care professionals worry about?

Injecting drug use

Physical harm



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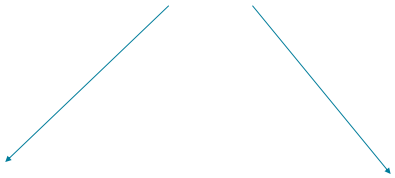
Injecting drug use



Physical harm

'Related' harm (e.g. BBVI)

The number of new HIV diagnoses in Australia has remained stable over the past five years (1,066 in 2012; 1,030 in 2013; 1,084 in 2014; 1,027 in 2015; and 1,013 in 2016)

Male-to-male sex continues to be the major HIV risk exposure in Australia (70% of new HIV diagnoses in 2016)

Injecting drug use accounted for 1%

Both male-to-male sex and injecting drug use accounted for 5%

Source: Kirby Institute. HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report 2017. Sydney: Kirby Institute, UNSW Sydney; 2017.

Sharing injecting equipment which has already been used is a significant risk factor for BBV transmission

PIED users tend to have low levels of BBVs such as Hep B, Hep C, & HIV

No PIED injector recruited through the ANSPS in 2011 tested anti-HIV positive; PIED injectors were significantly less likely to test anti-HCV positive compared to non-PIED injectors (Iversen et al, 2013)

Six of 63 blood samples contained hepatitis C virus antibodies and 12% tested positive for hepatitis B core antibody; none contained anti-HIV (Aitken, Delelande & Stanton, 2002)

3% screened HBV positive, 5% screened HCV positive, and 12% screened HIV positive 2

Of the six hepatitis C-antibody-positive participants, none reported ever injecting steroids with a needle and syringe which had already been used by someone else (Aitken, Delelande & Stanton, 2002)

HCV positive self-reports were associated with having ever injected other illicit drugs and lifetime use of heroin (Larance et al, 2005)

All participants who reported being HIV positive identified as gay or bisexual men. HIV self-reports were associated with having injected an illicit drug (Larance et al, 2005)

Small numbers in some studies reported sharing or reusing injecting equipment such as needles or containers and vials

One participant from 152 indicated that they had shared injecting equipment (Plowright, 1993)

One participant from 100 participants had re-used someone else's equipment but not in the past 12 months (Peters, Copeland & Dillon, 1997)

5% of 56 participants had ever shared needles or syringes (Larance et al, 2008)

Data from the ANSPS found that AAS users were less likely to share needles in the past month compared to non-AAS injectors (Aitken, Delelande & Stanton, 2002)

This is not not an important

Is it their important issue?

What do they want?

Information sought, information shared: exploring performance and image enhancing drug user-facilitated harm reduction information in online forums

Boden Tighe, Dr Matthew Dunn, Dr Fiona McKay, & Timothy Piatkowski

Tighe *et al* (2017). *Harm Reduction Journal*. 14:48

Results

134 threads and 1,716 individual posts from 450 unique avatars were included in the analysis

Analysed threads as a whole

Two overarching themes:

1. Discussion about personal experiences and advice and recommendations
2. Referral to services and referring to research

Concerned with sharing advice, experience, information, tips, and knowledge (much of this anecdotal with no scientific basis [not designed to be based on science])

Shared ratings and reviews of products; again, personal experience (bias towards positive effects but a lot of discussion about negative effects on mental health)

Concerned with sharing advice, experience, information, tips, and knowledge (much of this anecdotal with no scientific basis [not designed to be based on science])

Shared ratings and reviews of products; again, personal experience (bias towards positive effects but a lot of discussion about negative effects on mental health)

*"Member 1: If you are prone to anxiety don't do it. It will f**k with your head.*

Member 2: I agree this stack put me in some dark places."

Concerned with sharing advice, experience, information, tips, and knowledge (much of this anecdotal with no scientific basis [not designed to be based on science])

Shared ratings and reviews of products; again, personal experience (bias towards positive effects but a lot of discussion about negative effects on mental health)

*"Member 1: If you are prone to anxiety don't do it. It will f**k with your head.*

Member 2: I agree this stack put me in some dark places."

Seek: Side effects, results, course duration/type, products
Receive: Specific instruction, advice, recommendations

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When do they want it?

Members actively sought to increase their knowledge and education about the substances they were using and how they could get the results they were seeking

Experienced members shared knowledge and experience

Much of the advice was of a harm reduction nature

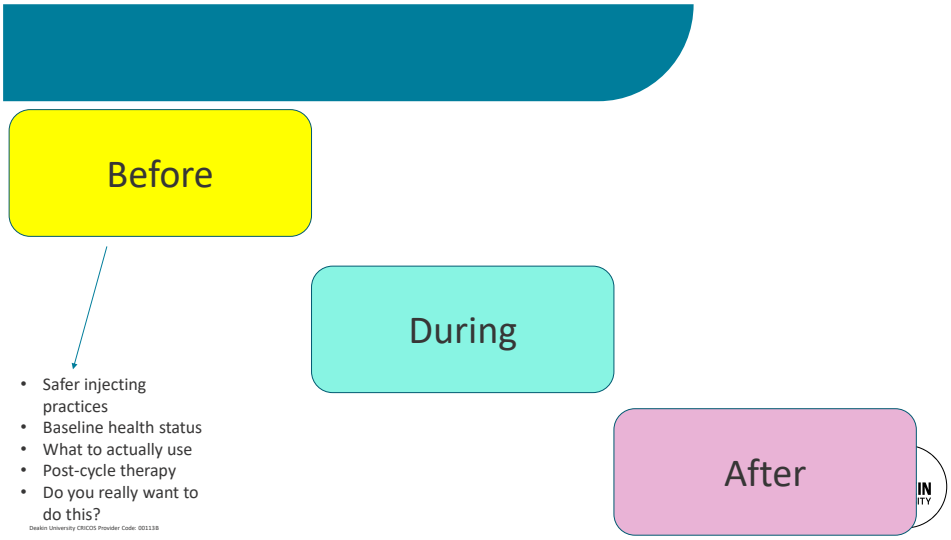
Acknowledged the limitations of their own knowledge

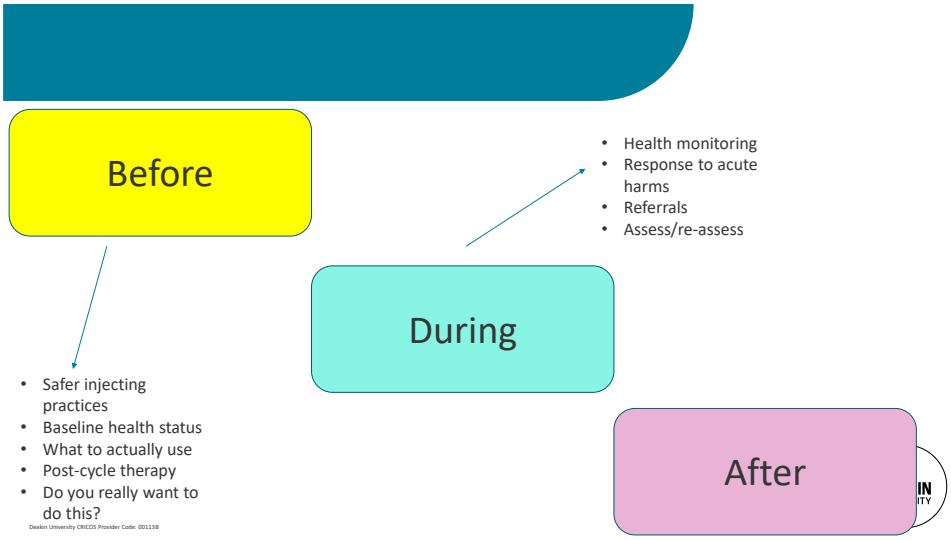
Engagement with health professionals was recommended prior, during, and post-course

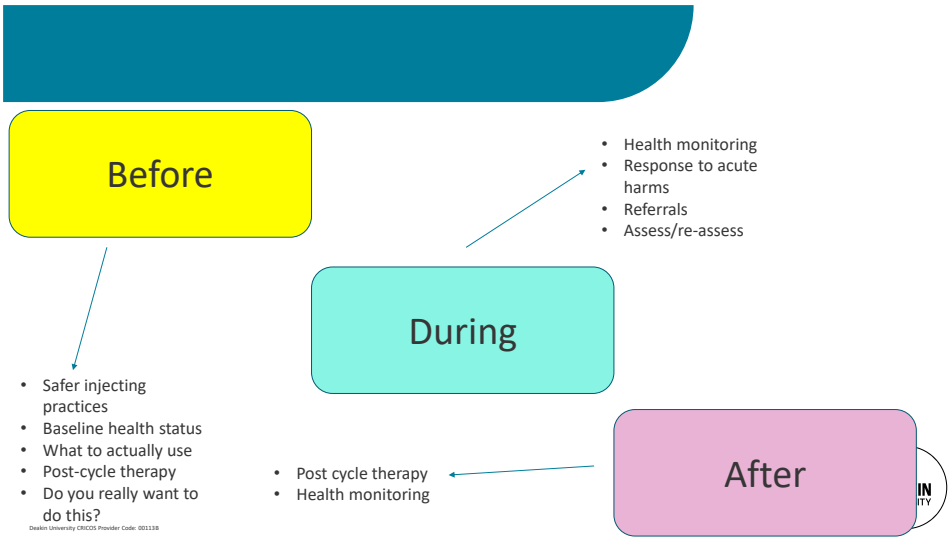
Before

During

After


Before
During
After
• Safer injecting practices
• Baseline health status
• What to actually use
• Post-cycle therapy
• Do you really want to do this?


Before
During
After
• Health monitoring
• Response to acute harms
• Referrals
• Assess/re-assess
• Safer injecting practices
• Baseline health status
• What to actually use
• Post-cycle therapy
• Do you really want to do this?


Before
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• Assess/re-assess
• Post cycle therapy
• Health monitoring
• Safer injecting practices
• Baseline health status
• What to actually use
• Post-cycle therapy
• Do you really want to do this?

How?

Online

Community
Range of opinions and experiences
Peers
Anonymity → discuss things normally not discussed (e.g. mental health)

In person

Do not discount the value of talking to another person in the real world!
When you need an 'expert'

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Steroid users and the unique challenge they pose to needle and syringe program workers

Dr Matthew Dunn, Dr Fiona McKay & Dr Jenny Iversen

Dunn, McKay & Iversen (2014). *Drug and Alcohol Review*. 33, 71-77

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NSP workers had limited knowledge about these substances (both what they are and why they are used)

System orientated toward illicits & prescription substances

↑ knowledge? Talk to a PIED user!

PIED users see you as experts in what you do. They're experts in what they do

NSP workers had limited knowledge about these substances (both what they are and why they are used)

System orientated toward illicits & prescription substances

↑ knowledge? Talk to a PIED user!

PIED users see you as experts in what you do. They're experts in what they do

"There are kind of peer leaders in a way in these groups, people that know, 'Oh he's the guy that getsthe needles, he knows how to inject.' . . . We have people come in, they say, 'Oh, our friend from the gym sent us in here."

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Do performance and image enhancing drug users in regional Queensland experience difficulty accessing health services?

Dr Matthew Dunn, Mr Richard Henshaw, Dr Fiona McKay

Dunn, Henshaw & McKay (2016). *Drug and Alcohol Review*. 35, 377-382

Deakin University CRICOS Provider Code: 00113B

Medical practitioners ☹

Anti-ageing clinics ☺ ☺

Pharmacists/chemists ☺ ☹

NSP workers ☺

"Needle and syringe programs were preferred because of the high level of knowledge of the staff as well as the free equipment; yet, among this group, stigma still exists in attending this service, with some reporting discomfort in attending a service, which is seen by this group as primarily aimed towards those who inject drugs." (p381)

Work with people who use PIEDs to understand their health needs and concerns, not at them

Thank you

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Session two: Service providers and other stakeholders

Lived experience account: Anonymous

I am a 42 year old Asian man with a predominantly gay sexual history, but I am now bisexually active.

In 1997 at age 21 I began working out in what was my third year of university (but my first year of an engineering degree). I worked out at the university gym 5 days a week. My motivation for going to the gym was purely aesthetic—I wanted a highly muscular body like those I'd see in bodybuilding magazines. My Italian boyfriend at the time, who had a brother that was a competitive body builder, said to me that in order to get a body anything like the ones I was admiring in the magazines I'd need to go on steroids. This was about one year after having started working out. I continued gyming 5 days a week for four years throughout Uni. I put on weight and some muscle but my shape was not developing in the way I wanted. Whilst I was happy with the weight gain, I figured that to achieve the body I wanted I had to get on steroids.

A couple of years after working as a graduate engineer at various places in regional Victoria and metropolitan Melbourne, I settled into a position in the western suburbs. I worked out at a local gym that had quite a few very muscular and good looking Mediterranean boys whom I admired. Many of them were clearly on steroids. I was befriended by a young muscular Maltese guy that I suspected was on the gear but he had denied it when I asked him about it. We started working out together and after around 8 months he said he wanted to go on a cycle and asked if I wanted to. It was him that gave me my first injection at about age 27. It was pre-smart phones and I don't recall doing much research apart from talking to a few guys at the gym. Most of the information I got came from my gym partner, who seemed to me at the time to know a lot about it, and I trusted him. First injection was in my glute and we did a whole 8 week cycle together. He injected me every time, about once a week. We were only taking testosterone and we never shared needles. My gym partner would get needles and syringes from a needle exchange centre. We were never

worried about blood borne viruses; in fact, we didn't discuss them. I assumed a kind of an unspoken understanding that blood borne viruses were not an issue if we injected safely and with clean needles. My main concern was dealing with the long needle required for intra-muscular injection.

After the cycle I put on about 8 kilos in 8 weeks and my body had noticeably changed. Prior to taking steroids it had taken me 6 or so years to put on 10 kilos. Not all of the weight gain was muscle, of course, but I saw how rapid the change was with only one cycle. The side effects at the time were only unsightly acne after the cycle, but I didn't care (and I soon learnt to take Isotretinoin to treat the acne.) After the first cycle I began seeking out dealers and talking to more friends, many of whom recommended taking different types of steroids.

Within 8 to 12 months after the first cycle I started doing my own further research. I bought several e-books written by experienced body builders and would regularly read body building forums, many of which included extracts from medical research and discussions by doctors and others that had experience using a range of steroids. I was aware of the wide range of extremely negative medical views on the serious health consequences of steroid use, however I favoured the views of experienced body builders over medical authorities who had no actual experience of personal steroid use. For me, the standard dire medical warnings were far too extreme and focussed on worst case scenarios. The idea of negative long-term effects seemed irrelevant to me at the time; I wasn't focussed on the long term. And I associated the widely discussed health problems with extreme and high dosage steroid taking by competitive body builders. That said, experienced users certainly recommend getting regular blood tests for kidney and liver function to monitor health, and I had been given a card of an outreach worker on each visit to the needle exchange, who gave me the contact details of a doctor known to be non-judgemental about steroid use. So I began seeing the doctor for regular check-ups and to get Isotretinoin for the pimples and Tamoxifen for gynecomastia.

For several years I did about 2 or 3 cycles a year, and after that I starting adding an 8 week ripping up cycle of Stanazolol and testosterone propionate in summer. I began devising my own stack of steroids, dosages, cycle length, and post-cycle therapy. I have now

experimented with longer cycles, higher dosages, different combinations of steroids (injectables and orals), human growth hormone, and peptides. I've been on steroids for around 15 years. Amongst users the general advice for amateurs is to take the same time off-cycle as on-cycle, and I did this for around 6 years. Now, however, my cycles are getting longer and the off periods have shortened to about 4 weeks. I was introduced to bridging cycles, by an online body building coach, who tailors training, nutrition, and chemical programs for a fee. Bridging cycles involve taking small doses during the "off" periods. This is widely practiced by professional body builders. My reason for experimenting with different cycle length is the constant quest to develop bigger muscles and better shape.

Usually I don't disclose my steroid use to anyone accept those that I assume are on them or those that have an interest in taking them. And aside from friends that I know well, others don't ask about it. That said, those in the know often assume I'm on the gear because of my physique. Over the years I have helped many buddies when they have come to me for advice. I've given them advice on dosage and steroid stack, told them where to get needles, syringes and swabs, and the type of needles to use for different areas of the body, and I've referred them to websites with injection information and the doctor I see for regular check-ups.

After 15 years on steroids, I have had no health problems and I think the physical results have transformed and shaped my personality and interpersonal skills in very positive ways. I am much more confident, outgoing and assertive in certain social contexts. There are, of course, the obvious downsides during off cycles or when taking certain kinds of steroids, such as irritability, short temperedness and intolerance. Difficulty sustaining erections is another side effect, which I manage with Cialis. There are some steroids that completely erase my libido, so I avoid them. As I get older I am increasingly thinking about the potential long term health effects. I think about getting off steroids but they are so entangled in my whole sense of self now that I'm not sure how I would function without them. In a way, I think of it as a kind of addiction, but more a mental and emotional than a physical addiction. I feel addicted to the lifestyle and the sexual and non-sexual relationships and admiration it helps foster. I think I can deal with the physical withdrawal symptoms associated with a lowering of testosterone, however, because I see the testosterone/steroids as a power

source for the person I am now, if I take that power away I'm not sure of the person I would be, and how others would view me as a 'normal' looking person. So I'm ambivalent about going off steroids, especially because I've had no health problems to date. I'm not fearful or anxious in any way about what my sense of self might be post-steroids, I just know it would be a significant adjustment and at this stage I don't know if I'm interested in making that adjustment. If I were to be diagnosed with a serious health condition thought to be the result of steroid use, however, I'm certain that would force me to recalibrate my sense of self and get off the gear.

It is certainly not the fact that steroid use is illegal and stigmatised that would influence my decision to stop, as I see the reasoning behind criminalisation and stigmatisation as simplistic, unrealistic, and unhelpful. I think at the root of the stigma is a concern that because it is a form of synthetic enhancement and it makes your body extra-ordinary, many people can't make sense of it and therefore see it as unnatural, unhealthy, and to ordinary gym goers, a kind of cheating, as though you have chosen an easier path. This is completely untrue as steroids are not magic potions that produce muscles out of nothing and without hard work. I know this belief exists because many guys come to me deludedly thinking they will only need to do one or two cycles to achieve a body like mine.

It seems to me that that steroids aren't illegal and stigmatised simply because they can have negative health effects. I think the issue is that they are used amongst bodybuilders to transform the very boundaries of what is considered a normal human body. And it is the obvious visual appearance of anything out of the ordinary that is problematic and induces discomfort for many people. After all, testosterone and human growth hormone are also often 'therapeutically' prescribed and this is not stigmatised in the same way because I think the physical or visual effects don't exceed what is considered normal. Similarly, alcohol in moderation is widely accepted, but when abused it is unhealthy and is stigmatised, though not illegal of course. I think this is in part because alcohol in excess, unlike steroids to excess, does not necessarily transform the visual boundaries or behaviour of the normative human body in any obvious way. When it does it is problematized. Similarly, excessive drug use is also unhealthy, stigmatised and prohibited perhaps because it too transforms the visual appearance or behaviour of a person beyond acceptable norms.

Sally Finn | St Kilda NSP, Salvation Army

Text of presentation: In the early days, the late nineties and early noughts, we referred to the PIEDs users as body builders. We didn't see a lot of them, but when they did come in to our NSP, they knew exactly what equipment they wanted and exactly how to dispose of their used equipment. They also, I would dare to say, knew, not only how to behave amongst our other service users, but how to behave in front of NSP workers, which I would roughly sum up as being non-judgemental.

At some point, perhaps around 2010, things in regard to the PIEDs cohort changed dramatically, mainly due to the increase in their numbers. They were, I guess you could say, far more representative of the general public.

In direct contrast to what NSP workers were used to, PIEDs injectors looked far less muscly and also knew nothing about what equipment they were after. Someone had, maybe, injected them once, like yesterday or the day before, and told them to come to Grey Street to get clean equipment. In stilted incorrect language, or, after trying to read scrappy notes or a message on their phone that they would often hand over rather than try to relay, we would give them their equipment and ask if they had someone to help them inject. If they said 'no', we might be able to get some info over to them about swabbing their site properly. But as for all the other necessary things that we wanted to say, it was unlikely, if not impossible, to reel it off. One of the things that became apparent during that time was that the best interactions, a little like in actual life, occurred when a conversation was had with the person.

Of course, it sounds simple. And best practice is full of such conversations. But there are barriers to having these sorts of talks with PIEDs injectors over the counter at a needle and syringe program and I'm interested in not only why that is, but how over the years we've become better and better at having them.

The first barrier comes perhaps from the fact that the newly initiated PIEDs user, (of which we know from Rachel Rowe, Israel Berger and Jan Copeland's research into people who inject PIEDs in the Sydney area, there are considerable numbers of) is the fact that they not only differentiate themselves from our other clients, but that they spend considerable energy trying to convince the NSP worker that they are from a different group.

I call this the hijacking effect. Valuable time is lost with this need to perform this act. Actually, it's something that also hijacks the clients' ability to take in the information they are being offered. In this way, if the worker is drawn into this back and forth, then things can really go south. But sometimes, unless some of that is gotten through or gotten out of the way, then the info is lost anyway.

This, as I said, seems rather basic, however when you've got a situation in which a worker works very hard to do their job well by treating everyone who walks through the door without judgement, and there are clients who come in actively being judgemental, it's a strange confluence of a situation.

Let me give you an example:

PIEDs client leaning over counter and saying: 'I don't know how you work here. Everybody's off their tits, walking around like zombies. You deserve a medal.'

Actually, the people he was talking about had been standing around waiting to see a crisis contact worker and weren't here to pick up needles from the exchange at all. But rather than begin on a dissertation about the correlation between poverty and people's health issues, about the society's lack of equality and the differences in opportunities for people of different backgrounds etcetera, etcetera, it was best just to concentrate on the obvious judgement.

'I guess people have got different priorities,' I said.

There were a few more back-and-forths before he said. 'Yeah, but it's so strange.'

'You know,' I said in my instructional voice, essentially not prepared to give into him. 'People think what you do is pretty strange.'

He nodded in a 'fair enough' kind of way, and I hoped that it would have the effect of closing down some of the voyeurism that I've seen in the PIEDs users' eyes, which is, I have to say, better than the pure disgust.

Of course, PIEDs Users act like this as a way of shoring up their position as being distinct. They are, in a very natural manner, asserting to the world that they are doing nothing wrong.

As an addendum to this little story, I'd like it to be noted that while our regular clients have a mixture of judgemental thoughts themselves (they too are a snapshot of the general public) I've never experienced them being judgemental of PIEDs injectors.

But let's get back to best practice: In the pursuit of it, NSP workers need to throw off the protective cloak they wear in regard to the bulk of their client group, they have to skip the hijacking phase of interactions, to concentrate on the (not to put too fine a point on it) 'do you know what you're doing?' phase.

Strangely, the barrier to these conversations, is a matter of the client not knowing what they don't know. Finding out these blind spots is like having a combination to a safe.

We've been running a little survey in the exchange asking PIEDs clients what drug they are injecting, if they're doing it alone or with one other or in a group, and, finally, do they know the risks associated with injecting and contracting a BBV. In answer to this last question 80 percent said, 'Yes', they did know the risks associated.

I'd hate to say that I didn't believe them. But it must have been true because I started asking my own 4th question which was: 'Do you know what a BBV is?'

Very few of them did.

This exercise, however, which we ran over approximately three weeks, created some of the best conversations that I've had with PIEDs users since my time in the NSP.

It's no secret, present company excluded, that humans are adverse to taking in new information. It feels like hard work or that they can't take one more piece of knowledge on board. But this, I think, in most cases, is not true. It's all about our motivation to listen actively. And, once engagement has been established, then, taking in information seems to become interesting, especially if it's gathered in a context that's meaningful in a personal way. The thought that we can't fit it into our brain, falls away, and it seems to lighten our load rather than weigh us down.

Knowing what a BBV is, is important. Of course, not as important as knowing how to prevent getting infected by one. The conversation between the NSP worker and the client, has to be interactive to get to this point. And, given the barriers we've talked about, to get to the bones of this in this very quick convo-exchange, is not as easy or straightforward as it might seem.

Conversely, something that surprises me, the NSP worker (again as pointed out in Rowe, Berger and Copeland's research) is considered by the PIEDs users as the most reliable source of information about injection they can get. More reliable in fact, than doctors, the internet, mates and a bag of other sources. What that means to me, and what we've been concentrating on at St Kilda 24/7 NSP, is maximising the opportunity to engage in a conversation, short as it might be. We utilise our bestest general skills that we employ with all clients: politeness, care, interest and the dissemination of facts about injecting both subcutaneously and into the muscle.

So, when we ask the question, 'have you been sharing equipment since your last visit?', which the PIEDs clients usually bridle at, we persist with the clarification of exactly what we mean by this. That, for example, it doesn't just mean sharing needles, it means using in the same area as someone else. Using the same vials as someone else. Using the same cleaning equipment, whether it be swiping a site or using a towel that's not discarded, that they wash their hands with.

In fact, the most knowledgeable PIEDs users I've come across are those who are health professionals themselves or have either been in prison or used recreational drugs as well. I remember a great interaction with a client who was very forth coming, not only about his own hep C status which he'd contracted in prison and since cleared from his system, but the kinds of group-using situations he'd encountered.

One of the most startling things that he said to me, was that people never spoke about BBVs and that people didn't believe him when he'd told them 1. That he'd had hep C in the past and 2. That he had been in prison (even when he explained that that's where he'd contracted it.)

I think I learned from him that this group (the PIEDs clientele) believe that taking these performance and image enhancing substances, actually puts them into a group (a secret society, if you like, that not only holds those secrets from the outside world but also from one another in the inside world) I think this group really believe that they are caring for their bodies when they inject these drugs. I think they believe, along with all those who spend money on supplements and vitamins, that they are doing themselves a great favour.

To put it another way: they lack the great shame that our other client group hold. Rather than guilt, they feel strengthened by their beauty regime. Many have been thinking of 'getting fit' for years, and this is a first best extraordinary step. This is the first big move to improving oneself. They just have to do one 'bad' thing, and that's go to the NSP where there are scary people, and pick up needles. Once they're through that gauntlet, they're home and hosed.

I'm exaggerating to make a point, but like all exaggerations there is something in it.

I'd like to finish by relaying a story about my first best interaction with PIEDs clients. It was years ago and the clients were identical twins. Two young men, you couldn't pick from each other. Small lovely looking, physically fit young men who asked me if I had any information on steroid injection.

Well, of course, I was only too happy to offer up what I knew, including handing out Kay Stanton's business card so they could call her. But, it was their interaction with one another that really got the conversation going. One would ask a question on the back of the question that the other had asked.

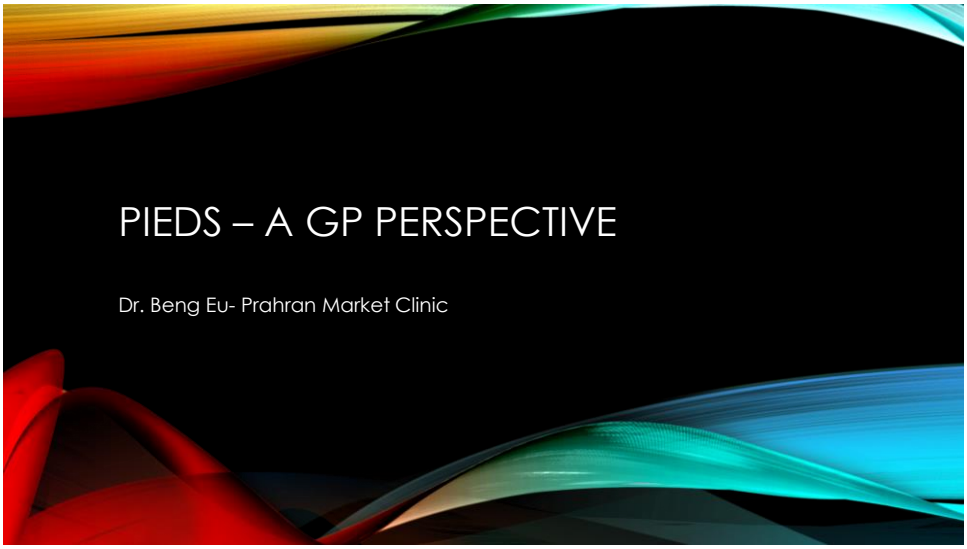
This sort of piggy-backing conversation isn't just confined to twins. I've seen it occur when I've had students observing in the exchange, and indeed when they are just two PIEDs clients with the same low level of knowledge.

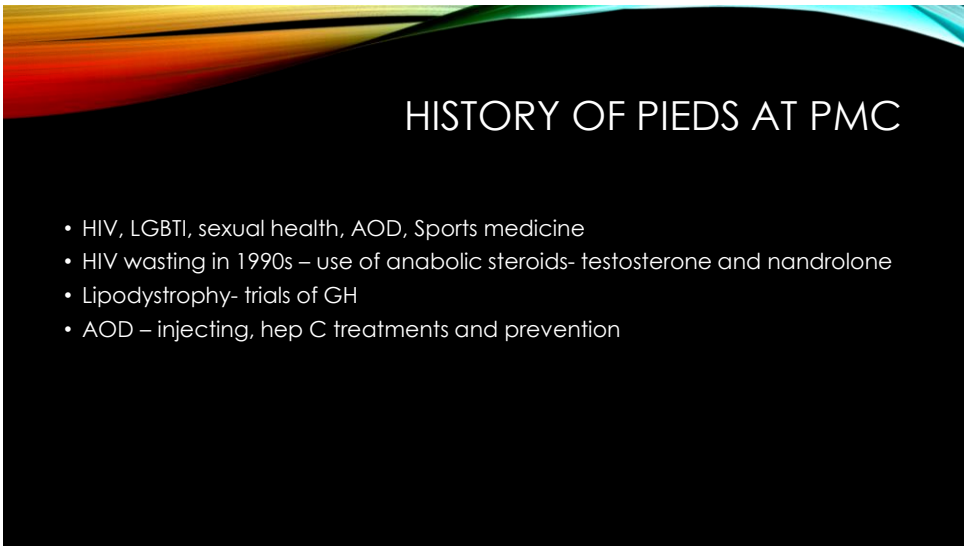
And that seems to be the key. If one of them knows more than the other, even if it's just perceived knowledge, then the conversation either goes through that more knowledgeable person, or doesn't occur at all, even if the novice is at the window asking for the equipment.

So, to wrap up, I would say that NSP staff have had a great interaction when they've had a full-circle conversation. When the client is walking out saying thanks, that's great, thanks heaps, and when the worker is saying no worries, if you need more help you've got that phone number, then things have more or less been achieved and, more importantly, have opened up the possibility of more future discussions down the track.

It has been a conversation in which the NSP worker has learned things too – a conversation like all the best conversations which informs all who are involved.

And to get to that point, the potential for hijacking has been circumnavigated and the gates of what the PIEDs client think they know have been opened in such a way that they think, this NSP is my place in the same way that our other main client group also think that the NSP is their place.


PIEDS – A GP PERSPECTIVE
Dr. Beng Eu- Prahran Market Clinic


HISTORY OF PIEDS AT PMC
• HIV, LGBTI, sexual health, AOD, Sports medicine
• HIV wasting in 1990s – use of anabolic steroids- testosterone and nandrolone
• Lipodystrophy- trials of GH
• AOD – injecting, hep C treatments and prevention

ATTITUDES, RESEARCH, EVIDENCE

- GP attitudes- great variability within clinic and between practices. AOD, Anti-ageing, HIV/hep C clinics
- Research- no formal research into medical evidence of pied use- ethical consideration and legality
- Information inferred from medical use and anecdotal evidence
- Many gaps in knowledge

GP CONSULTATIONS

- Types of pieds seen- testosterone (+analogues), peptides, growth hormones, rarely insulin type products. Mostly injected.
- Usually referred by friend or users group. Some existing patients
- Variable knowledge
- Discuss medical info and role of medical input

GP CONSULTATIONS

- Type of PIEDs
- Assess knowledge – check if expectations are realistic – eg. Diet, exercise, goals
- Discuss potential side effects – muscle gain, cardiac, liver, kidney, acne, skin, breast changes hair growth/loss, HT, cholesterol, libido and mental health.
- Discuss injecting practice – offer advice and demonstration if required
- Discuss health monitoring- baseline tests and measurements, repeated after pieds and some time after. Discuss side effects versus benefit.
- Treat and advice on any adverse events

MOST COMMON SIDE EFFECTS

- Abscesses
- Gynaecomastia
- Libido, energy level changes
- Acne
- Mood changes/ mental health

GAPS IN KNOWLEDGE

- No clinical trials on PIEDS. Information from medical use
- Many PIEDS- non- medical products
- Side effects likely dose related- what is a safe dose?
- Steroid cycling – common sense but not scientific
- Long term side effects of hormone/PIEDs use

CHALLENGES

- Finding out more information about products used – evaluating any evidence available.
- Finding doctors who will manage health of PIEDs users- non-judgemental clinicians who will focus on health.
- Targeting appropriate population with information or resources
- Public health information about harm reduction

Bill Moore | Fitness Australia

FITNESS AUSTRALIA

Bill Moore

Chief Executive Officer

THE PERFECT STORM

- Readily available supply of a wide variety of PIEDs
- The Fitspo generation with a perfect delivery system
- The rise and rise of strength training
- The rise of the 24/7 club with private cubicles and unlimited availability
- The contemporary physique competition scene
- Ample information online to inform PIEDs users

SIXTEEN WEEK PIEDS CYCLE

- 1000mg per week of testosterone enanthate
- 500mg per week of trenbolone enanthate
- 800mg per week of primobolan
- 80mg per day of anavar (oxandrolone) for the first 6 weeks of the cycle
- 75mg per day of winstrol (stanozolol) for the last 6 weeks of the cycle
- 6IU's per day of HGH
- 4IU's per day of insulin
- 20mg per day of Cardarine – GW501516

THE FITNESS INDUSTRY RESPONSE

- Health clubs largely prefer to avoid the subject due to commercial considerations
- Overt reference to PIEDs or harm minimisation strategies risks reputational damage
- Little knowledge or understanding of the legal framework they work within
  - Duty of care and negligence
  - Workplace Health and Safety legislation
  - Workplace Relations legislation
  - Australian Consumer Law
  - Privacy Law
- Rise of franchises has distanced many club owners from day to day activities

THE FITNESS AUSTRALIA RESPONSE

- Revision of National Code of Practice to include specific references to PIEDs
- Open the conversation in the industry to raise awareness
- Development of Continuing Education course with ASADA that covers:
  - Identification of potential PIED users among clients
  - Education resources for possible PIED users
  - Policies or maintain a drug free culture
  - Health risks of certain medications and PIEDS
  - Ways to promote safe and legal weight gain and loss without encouraging PIED

CHALLENGES AND REMEDIES

- Breaking the Code of Silence
- Lack of advocacy by industry
- Much of industry in denial
- Little if any reference to PIEDs in communications to health club members
- Lack of education around PIEDs and unsafe injecting practices
- Perception that pharmaceuticals are high quality and therefore safe
- Conflicting information on line

Panel and General Discussion

	Panel Kate Seear (Kate) (chair), Finn (F), Beng Eu (BE), Bill Moore (BM), Kay Stanton (KS)
Questions posed to the panel **1.**	*Kate: What issues did the forum raise for you today?* **Finn** expressed concerned about how PIEDs-related risks were being framed. Finn explained that PIED consumers need clear messages about harm reduction/health promotion, especially blood-borne viruses, that do not ostracise them. **BE** said he was surprised that there were not more GPs open to seeing PIED consumers. **BM** said he thought the fitness industry underestimates PIED use by consumers. He also suggested that the fitness industry was implicated in the creation of a new audience for these products. **KS** suggested there is too much pressure on gyms to install sharps bins and supply health promotion materials. Instead of "in your face" advertising, it is possible for workers such as her to work discreetly with gyms to dispose of injecting equipment.
2.	*Kate: What can we do to work more collaboratively?* **Finn** suggested that gyms need to take more responsibility for PIED-related harm. NSPs could develop a relationship with them, especially for needle and syringe disposal. **BE** noted the lack of medical professionals willing to help/collaborate. He suggested that PIED consumers need to be more actively linked to health services. **BM** observed that promoting collaboration is a huge challenge. Commercial operators deny the existence of PIED use or are unaware of the issue. In addition, the majority of health clubs are franchises not owned by fitness people, so those in positions to make decisions rarely encounter the issues. The way forward might be to target larger associations.

3.	*Kate: Why is there such a dearth of doctors working in this space?* **BE** suggested that willing doctors do exist but need to be identified and recruited into PIEDs-related practice. He speculated that perhaps there is a perception they will be flooded with PIED clients. **KS** suggested that doctors need to increase their knowledge about steroid use to be more useful to PIED consumers. **Finn** noted that the harm reduction field is slowly building the capacity of NSP workers to work with this group.
4.	*Kate: What would you like to see done to combat PIED-related stigma?* **Finn** noted that NSP workers need further training on PIED consumers' experiences and making the interaction work at an optimal level. **BE** suggested that doctors would participate in PIED-oriented training if it were embedded in broader health-related training concerning hepatitis C or injecting drug use. **BM** speculated that combatting stigma was difficult because PIEDs are illicit. **KS** argued that community education needs to be a focus. She expressed an interest in targeting schools and educating teenagers about making better choices.
	Kate observed from the presentations that PIEDs consumers often want to distance themselves from other drug consumers. She asked how we can respect the needs of people who consume PIEDs without stigmatising other people who consume drugs. **Finn** hopes that exchanges at NSPs can help. Finn's approach is to be polite, caring and persistent, but also does not grant PIED consumers special status. **BE** explained that, while important, stigma reduction is not a focus of his daily work because of time constraints. **BM** observed that PIED consumers use other drugs too. Kate agreed that the distinction between PIED consumers and others is not clear, even though some PIEDs consumers assume it is.

	KS noted that PIED consumers do not want to be classed as 'junkies'.
Questions from audience	*Do we need government funded taskforce to fund collaboration between different sectors and implementations?* **Finn** replied that top-down directives that are properly funded and auspiced will be the most effective. *Is there scope for PIED consumers to form a consumer movement?* **BM** said that although this was an interesting idea, it would most probably struggle to gain traction in practice because the fitness industry is so fragmented. **KS** thought it would be unlikely to grow because PIED consumers were unlikely to be prepared to be open about their PIED use. **BE** commented that it would be useful to have a taskforce looking at legal issues around steroid use before focusing on advocacy groups. *Do health professionals need to approach people who use PIEDs as have a mental health problem?* **BE** explained that many PIED consumers do not think of themselves as having mental health issues. Mair Underwood commented from the floor that thinking about PIED use as a psychological problem is too pathologising, and it potentially stigmatises all PIED consumers. *Given steroid consumption is now listed in the DSM-5R as a form of addiction, do doctors have an obligation to treat them? Given medication-assisted therapies work in the addiction field, medical steroid prescribing might be a way to help PIED consumers regulate use.* **KS** said that most steroid consumers would pursue prescribed medications over unregulated products if they could.

Questions posed to the floor: **Suzanne Fraser**	
	What additional information and research would help you in your work with men who consume PIEDs? • Need to know more about how poly-drug use affects hepatitis C rates. • Because NSP work is mainly brief interventions, having targeted information to give to PIEDs consumers would be helpful. When workers are faced with complexity of use across different types of clients it is hard to know where to start. • What are the priorities for NSP workers when working with PIED consumers? Risk of infections? ***After attending today, what could you do differently?*** Consider the particular concerns of PIEDs consumers and reframe the focus on blood-borne viruses to also speak about the risk of other infections. The presentations highlighted an active online forum community. This could be tapped to explore what PIED consumers think the fitness industry could do differently.
Kate's summary	Many overlaps in issues between PIED consumers and other people who inject drugs that warrant more research. Key issues can be called the 'four Ss': *Silencing* PIEDs use is often hidden in that PIED consumers often don't tell partners, friends and families. There is also a lot of silencing in particular industries, such as the fitness industry. In addition, society more generally is not very good at talking about drug use.

	Stigma Stigma was a common theme across all presentations. However, although PIED consumers are heavily stigmatised, as Finn said, they lacked the 'great shame' that other injecting drug consumers carry. Some PIEDs consumers distance themselves from the idea they are 'drug users', who they see as participating in unhealthy practices. It is important to recognise that the stigma associated with other drug users also shapes the stigma experienced by PIED consumers. *Speaking* Although silencing and stigma are important forces, we need to acknowledge that *how* we approach these issues has certain kinds of effects. The challenge is how we can collaborate and not create new problems or divisions. *Synthesis* There are differences between groups of drugs consumers that we need to distinguish, but we also need to recognise links. This is not just in terms of stigma. Perhaps PIEDs consumers and other people who consume drugs are not so distinct, just as people who consume drugs are not so distinct from people who don't. Can we really tackle stigma without thinking about injecting drug use stigma? We need to talk and research with care.
8.	Thanks and close