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“You Could Try This Compound, but it Might Send You nuts”: How Steroid Suppliers Perceive the Underground Market and Their ‘Hybrid’ Role within It

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ABSTRACT

Introduction: The illicit manufacture and use of image and performance enhancing drugs (IPEDs) have increased. The underground market continues to meet consumer demands amidst evolving cultural narratives around most alluring IPEDs. This qualitative study aimed to provide insights into how IPED suppliers perceive demands within the current market and their roles within it.

Methods: We interviewed four IPED suppliers in Australia regarding distribution challenges and market changes. Interviews were transcribed and analyzed, with immediate reflective notes taken after each interview. Inductive line-by-line analysis facilitated identification and development of themes.

Results: Cultural narratives were perceived to influence the demand for several drugs (e.g. trenbolone, dihydroboldenone, fluoxymesterone) due to their perceived desirability and elevated status compared to other compounds. Consumers, who appeared to demonstrate knowledge gaps, were sometimes guided in their consumption practices by IPED suppliers, who drifted into a “hybrid” role of coach-supplier.

Discussion: IPED suppliers highlighted a perceived demand for specific AAS, driven by cultural narratives. Consequently, IPED suppliers assumed a hybrid role whereby they provide advice to the people who purchase IPEDs at point-of-sale. Urgent action is needed to address cultural narratives and provide education and harm reduction to support people who use IPEDs.

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Introduction

Many image and performance enhancing drugs (IPEDs), such as anabolic-androgenic steroids (AAS), were originally developed for medical purposes (Esposito et al. 2022), however, many are illicitly manufactured (Magnolini et al. 2022). Off-label consumption of these substances is predominantly facilitated through illegal channels (Coomber et al. 2014; Piatkowski et al. 2023), particularly with the rise of online markets (Cox, Gibbs, and Turnock 2023). Although researchers have examined the experiences of individuals involved in homebrewing and local market supply in the US and UK (Brennan, Wells, and Van Hout 2018; Kraska, Bussard, and Brent 2010; Turnock 2020), further research is necessary to explore and understand supply dynamics in other contexts and geographical locations. One area with scarce research is Australia, where the illegal status of AAS has led to the proliferation of a prominent underground lab AAS market, which has developed in response to the demands of people who use AAS (Piatkowski et al. 2023). The practices of people who use AAS vary depending on their motivations, prior knowledge, cultural embeddedness within AAS communities and their experiences (Santos and Coomber 2017). People

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who use AAS typically have a limited understanding of AAS before initiating their use, often relying on information obtained from peers and suppliers (Piatkowski, Gibbs, and Dunn 2023; Turnock 2020, 2021) as well as IPED coaches (Gibbs, Cox, and Turnock 2022; Piatkowski et al. 2024) which may sometimes be inadequate (Santos and Coomber 2017). The interplay of various roles and behaviors within AAS communities significantly shapes their consumption practices. IPED suppliers, often acting as peers, may also provide information and advice at the point-of-sale. Thus, suppliers wear multiple hats and switch between these various and somewhat contrasting roles depending on the situation. Given that AAS populations are also notoriously difficult to reach (Bates et al. 2019), suppliers can offer unique insights into consumer interactions and market trends, revealing emerging patterns of supply.

The landscape of IPED supply has evolved amidst a rapidly changing environment, responding to the needs and preferences of potential customers. For instance, certain compounds, such as trenbolone, have garnered significant attention due to their perceived effects and associated risks (Lamb et al. 2024; Piatkowski et al. 2023; Underwood 2022). Trenbolone holds a dominant place within the socially constructed drug hierarchy within this community (Lamb et al. 2024) and is known to increase muscle mass at a significant rate (Yarrow et al. 2011), however, is also associated with significant physical (Beg, Siddique, and Afzal 2007) and psychosocial harm (Zellerroth et al. 2024). This allure regarding trenbolone has been propagated through a variety of channels, both online and in person (Piatkowski Neumann, and Dunn 2023; Lamb et al. 2024), generating a cult like status for specific compounds such as Trenbolone. Peer influence plays a pivotal role in this process as this community heavily relies on this “folk pharmacological knowledge” (Harvey et al. 2019; L. F. Monaghan 2002; Piatkowski and Cox 2024; Santos and Coomber 2017; Underwood 2017) and, thus, IPED consumers may seek out trenbolone and other similarly “hyped up” AAS. Consequently, people who use IPEDs may consider different products or reinforce a narrative around specific drugs and their potential. However, in addition to promoting specific compounds, some individuals within IPED communities also share information related to risk reduction (Cox and Paoli 2023) and this extends to coaches and educators (Piatkowski et al. 2024). This dissemination of harm reduction information is crucial and requires specific attention when considering the overall impact of discussions on IPED use.

The risks of IPEDs range from the physical e.g., hypertension, reproductive issues and blood-borne virus transmission (Esposito et al. 2022; Larance et al. 2008; Van de Ven et al. 2018) to the psychosocial e.g., aggression and depression (Nelson, Hildebrandt, and Wallisch 2022; Scarth et al. 2022). However, coaches and educators focusing on IPEDs need to balance and integrate harm reduction into educational content and, thus, often face challenges. While coaches and educators attract viewers and clients by offering dosing protocols, the reality is that content addressing health complications may garner minimal attention compared to discussions on specific “hyped” IPEDs like trenbolone. What is clear, is that specific substances have attracted increased attention from IPED consumers. The fact that these substances are also associated with heightened risk and health harms means that more careful interrogation of these shifts is necessary. Acknowledging the importance of peers within IPED use and the scarcity of research focusing on suppliers’ role within this discussion, it appears essential to explore how peer-suppliers shape perceptions and behaviors.

Theoretical Framing

As a result of systemic pressures, specifically the socio-legal landscape surrounding IPEDs (Piatkowski, Gibbs, and Dunn 2024), the proliferation of illicit “black” markets (Coomber et al. 2014; Magnolini et al. 2022), lack of engagement between healthcare professionals (Dunn 2022; Fraser et al. 2020; Piatkowski et al. 2024), and pervasive stigma (McVeigh and Bates 2022), IPED-using communities often rely on peers to navigate safety measures. These include peers who may be IPED coaches and educators (Piatkowski and Dunn 2024; Piatkowski et al. 2024), but also may include IPED supply. These understandings come from Matza and Sykes’s (1957) original concept of “drift,” which posits that individuals gradually become involved in “deviant” activities, including drug supply

(Taylor and Potter 2013). Coomber, Moyle, and South (2016) utilized this framing to understand social illicit drug suppliers' journeys as "incremental steps" rather than conscious decisions.

Drawing on this theoretical approach, IPED supply does not necessarily align with conventional perceptions of illicit drug trafficking, but as means of aiding others in the community or supporting personal use (Fincoeur and Mulrooney 2015; Turnock et al. 2023; Van de Ven and Mulrooney 2017). As extant work suggests, these evolving trends have led to small scale operations involving single actors or small groups being commonplace among IPED suppliers (Antonopoulos and Hall 2016; Coomber and Moyle 2014; Dunn, Bright, and Fletcher 2024; Fincoeur and Mulrooney 2015; Santos and Coomber 2017). Social capital plays a crucial role, enabling the distribution network to function effectively within this specific subculture (Piatkowski, Gibbs, and Dunn 2023). These types of transactions are typically guided by subcultural norms and social trust, with friendships often being essential for gaining access (Coomber, Moyle, and South 2016; Turnock 2020). In this context, IPED suppliers are individuals who blur the lines between "conventional behaviour" and "criminal activity," actively navigating their drug use and supply within an otherwise lawful lifestyle. IPED suppliers, who often provide advice and guidance at the point-of-sale, offer a unique perspective on consumer interactions and market trends. Their intimate understanding of the market can inform researchers and harm reduction practitioners about consumer behaviors and emerging patterns. Using this theoretical framework, we aimed to provide insights into how IPED suppliers perceive the current market and their roles within it.

Methods

Sampling and recruitment

This qualitative study recruited a sample of IPED suppliers by leveraging the first authors personal and professional networks within Australia. The first author's positionality as a peer-researcher, recognized within steroid communities globally, established through years of active engagement and ethical research practices, facilitated acceptance and trust among participants. Leveraging extensive networks and rapport cultivated over time, the first author navigated entry into these communities, thereby accessing samples that would have otherwise remained elusive. Participants were approached by the first author through previously used communication channels and, if they indicated an interest to participate, were sent the documentation and information relevant to the study through electronic means, using encrypted messaging applications in some instances. The study received ethical approval from the University Research Ethics Committee (Approval: 2023/781).

Materials and data collection

Semi-structured interviews were conducted with four IPED suppliers in Australia. Interview questions included: What challenges do you face in distributing IPEDs? Have you observed any changes in the global market for IPEDs over the years, and if so, how have these changes affected your operations? In your experience, what are some of the key factors driving the demand for IPEDs, and how do you keep up with the evolving needs of your customers. Interviews lasted between 50–75 minutes. These interviews took place on the MS Teams platform, where recordings were transcribed automatically and then checked for errors by the research team. Each of the interviews was saved on separate files. Raw data was then imported into analysis software for further analysis.

Data analysis

After each interview, immediate reflective notes were taken to facilitate immersion and familiarization with the data. This was followed by systematic, inductive line-by-line analysis (Neale 2016). After an initial review, the first author structured and prioritized coded points to form a coherent narrative,

setting the stage for further interpretive analysis (Neale 2016). The research team employed an iterative and collaborative process for developing coding and categories which were developed (Neale 2016). Specifically, the first author utilized NVivo (v12) to apply the inductively developed codes to all interview transcripts. The analysis focused on reviewing codes related to trends in supply to identify emergent analytic themes regarding harm reduction. This credibility was further strengthened by the inclusion of a current and globally renowned IPED educator in the data analysis and interpretation, whose expertise enhanced the study's relevance and resonance within the community. Regular discussions among the research team, focused on making meaning of the data and not consensus, fostered a more robust exploration of these themes and further refined the narrative. Researchers were aware of their positions and sought to challenge personal beliefs and assumptions. Collectively, we did this through group discussions to check and challenge that their interpretation and understanding was reflective of the participants (Zampini et al. 2021). Resultantly, we present two theme-categories which are representative of the key findings developed.

Results

“There’s definitely been a spike in tren sales:” Cultural narratives driving supply

The demand for specific types of AAS within the black market highlights the significant influence of cultural narratives on consumer behavior. Messages propagated through various channels, including online forums and social media, shape perceptions of desirability and efficacy regarding certain substances. This landscape creates a scenario where potential consumers are not only aware of, but actively seek out, specific AAS based on their reputed potency and effects. Suppliers reported that they were approached and asked for specific types of drugs, such as trenbolone. Given trenbolone's reputation as a potent and powerful AAS (Underwood 2022; Piatkowski et al. 2023; Lamb et al. 2024; Dunn, Bright, and Fletcher 2024), it appears that buyers are influenced by messages propagating the desirability of acquiring trenbolone, leading them to actively seek it out.

P1: Look, I'll have people come to me and say, hey, can I, they'll give me their name, shipping address, and they'll just say 3 tren. [trenbolone]

There were other compounds (such as Mibolerone and Fluoxymethyltestosterone) alongside trenbolone which were considered as “popular.” This “popularity” was perceived to be driving these underground sales, with consumers influenced by societal perceptions of the drug's desirability. The association of these particular drugs with characteristics like being “cool” contributes to their allure and motivates individuals to purchase them, reflecting the influence of social perceptions and marketing on consumer behavior (Bakken and Demant 2019).

P1: I mean, people hear about these products and they think that they sound cool because they do, you know, cheque drops [Mibolerone; Dimethylnortestosterone] are really cool, Tren [Trenbolone] is really cool. Halo [Halotestin; Fluoxymethyltestosterone], you know, these are all the things that are popular.

Social media influencers and micro-celebrities who wield significant sway over individuals in the fitness community (Gibbs and Piatkowski 2023), such as the TrenTwins (a pair of social media influencers known for their promotion of bodybuilding and fitness), were perceived to have played a role in propelling drugs like trenbolone into popular consciousness. These “steroid celebrities” or “IPED influencers” have contributed to trenbolone's status among the general community, not just bodybuilders and fitness enthusiasts. The widespread recognition of trenbolone as the ultimate driver of aesthetics and muscle growth is evident in how individuals approach suppliers, reflecting a disconnect between societal perceptions and the realities of its' use, known to contribute to psychosocial harm (Underwood 2022; Piatkowski et al. 2023; Lamb et al. 2024).

P2: Social media like the bloody TrenTwins (micro-celebrities) . . . even just people like I've been walking through the streets and I've had young dudes like in their teens go like fuck dude. Like how much tren are you running?

Because they just know friends and they think “ohh anyone that’s got muscle is just on tren” and then there’s definitely been a spike in tren sales because of them or other influencers talking about it for sure.

Despite warnings provided at the point of sale about the potential psychosocial effects of trenbolone, individuals choose to disregard this peer communication of ethnopharmacological knowledge (L. Monaghan 2002), and purchase the drug regardless. This behavior underscores the allure and perceived benefits of trenbolone, despite the known risks and potential adverse consequences associated with its use. The disregard of health harms is particularly problematic, with specific AAS associated with elevated risk.

P4: [At point of sale] “Yeah, you could try this compound, but it might send you nuts.” And then he did buy trenbolone and, you know, fought everybody. Two or three people in one week.

Suppliers perceived there was a significant influence exerted by cultural narratives on individuals’ choices. Participant 2 used an example illustrating the decision of a customer to prioritize the purchase of Dihydroboldenone (DHB, 1-Testosterone) rather than food, with food likely representing the important contribution of diet to enhancing an individuals’ physique.

P2: He purchased these drugs instead of food because he was on Centrelink [Social Service Financial Support] and then the next thing we wanted to try was DHB [Dihydroboldenone Cypionate; 1-Testosterone]. And then after DHB, he wanted to try methyl-tren [Methyltrienolone], and then that’s where I stepped in.

The preference for other “cool” AAS such as DHB and Methyltrienolone (M-Tren) suggests a desire for rapid and dramatic results, even at the expense of overall health. Methyltrienolone, for instance, is known among the steroid community for its’ potentially toxic nature reflected in medical literature (Krüskemper and Noell 1966; Menon et al. 1978). At this intersection, however, our data suggest that suppliers might play a role, “drifting” (Matza and Sykes 1957; Taylor and Potter 2013) through their “supplier role” into “peer support” and, thus, guiding the consumer. This intersection of supplier and peer roles further blurs the lines between the provision of substances and the provision of education or support.

These IPED suppliers may be seen as facilitating the pursuit of aesthetic goals while potentially exacerbating the risks associated with AAS use, particularly among individuals with limited knowledge or resources. Indeed, it is possible that suppliers may have both the best interests of their customers and their own pursuit of profit and socio-cultural capital at the forefront of their services. This “drift” positions them as supplier and a peer or coach. Therefore, there appears to be a pressing need to address the cultural narratives of AAS use and to provide comprehensive education and support to individuals navigating these complex dynamics – what we term here as “steroid literacy.”

“If they want more information, they can book a consult:” Hybrid roles in supply and distribution

All suppliers also provided peer-led harm reduction advice, whether in their capacity as a supplier-peer or in a dual-role as a professional IPED coach. While it is currently unclear which aspect of these roles take priority, there is a merging of messages. This indicates a multifaceted approach to harm reduction within the AAS community and substantiates extant work around the evolution of specific IPED coaching (Gibbs, Cox, and Turnock 2022; Piatkowski et al. 2024; Turnock et al. 2023). There was an acknowledgment that while education is important, current issues with the quality of AAS and the underground market (Magnolini et al. 2022; Piatkowski et al. 2023) may overshadow its significance, highlighting the practical concerns faced by people who use AAS when attempting to access safe and reliable substances. This underscores the necessity of reputable suppliers to be showcased, better ensuing people who use AAS attain access the legitimate and

quality product, reducing the potential of health harms presented through fake and counterfeit AAS.

P1: I think from the user side, I don't think it's so much been an education thing, but maybe more of the availability of testing and just being fed up of getting shit quality gear.

At the nexus of these practical concerns, participant three explained how his diverse roles in providing AAS-related services complemented each other, allowing him to offer comprehensive support to clients. From supplying products to consulting on harms and offering optimization services, the approach integrated various facets of harm reduction and health management, reflective of the current state of "business" surrounding AAS globally (Cox, Gibbs, and Turnock 2023; Turnock and Gibbs 2023; Turnock et al. 2023). The current perspectives, however, further underscore the interconnect-edness of roles within the AAS community and suggests the emergence of a "hybrid" role that encompasses both supplier and coach functions – we coin the term "coach-supplier."

P3: [At point of sale] I ask them, are you testing your gear like I can give like I can. I can supply you or you still need to get it tested. I can't tell you [if] it's always going to be good enough. If they want more information, they can book a consult and I charge that separately and help write a plan for them and help keep them accountable for managing their own health.

While people intending to use or using AAS often seek information from online forums and social media (Cox and Paoli 2023; Paoli and Cox 2024), the emergence of online drug coaches (Gibbs, Cox, and Turnock 2022; Piatkowski et al. 2024) was believed to offer a potentially more reliable source of guidance. These coaches provide subscription-based services and resources, presenting an alternative to the often-unregulated advice found on forums. However, the varying quality of these coaches underscores the importance of discernment when seeking information on AAS use. Though scholars have argued in support of IPED coaches who provide information and advice outlining their potential to lessen the harms associated with AAS (Piatkowski et al. 2024), the extension of coaches into the domain of coach-suppliers raises a different type of question and throws up different concerns. Indeed, the ethical defensibility of such an extension requires careful consideration to weigh up the possible strengths and weaknesses.

P2: I think if you're getting free information off Reddit [online forums], or social media, it's probably take it with a grain of salt, but something like, as I said, [IPED coach] or [IPED coach] or [IPED coach] for the sake of \$50 to \$200 a month to have all those resources at your fingertips.

Moreover, the intertwining of supplier and coaching roles suggests complex financial motivations that may influence the dissemination of harm reduction advice. The participants in this study did note the presence of both reputable and unreliable coaches within the IPED-community, providing further weight to emerging evidence (Piatkowski et al. 2023, 2024). It is, however, problematic that more reputable coaches charge more for their services as they are in higher demand. This will exclude clients with less financial capital who will be driven toward less expensive and perhaps lower quality coaches, information, and harm reduction advice. This is just one of the problems associated with the "private" market for IPED harm reduction (Turnock et al. 2023) and which exposes sub-sections of the community who use AAS to a range of vulnerabilities through these inequalities. Indeed, creating gaps between disadvantaged and younger groups, who perhaps do not have access to the same means of capital or resource, is one clear concern here that would go against some basic harm reduction principles. These nuances further complicate the dissemination of quality harm reduction advice.

For instance, some coaches reportedly advocate for high compound doses, potentially perpetuating harmful practices among people who use IPEDs. When compared to doses in clinical literature, spanning 50-400 mg per week of testosterone (Horwitz, Andersen, and Dalhoff 2019), the idea of supraphysiologic doses exceeding 3000mgs may be concerning. We underscore this point and highlight the challenge of ensuring accurate and reliable information reaches individuals seeking guidance on use.

P4: You do have the issue with coaches and picking the good from the bad as well. I think there's people as you would have seen on Instagram. Getting on the air. Talking about not doing cycles of less than two grams. Stuff like that, unnecessary amounts, they're recommending that people do, bloody 2 to 3 grams a week.

The discrepancy between the availability of accurate information and its uptake by individuals underscored a significant challenge in disseminating evidence-based knowledge and practices within the IPED community. Despite increasing efforts in academic and public health literature to compile evidence-based education and harm reduction resources (Atkinson et al. 2021; Bates et al. 2022; Bates, McVeigh, and Leavey 2021; Grant et al. 2023; Hope et al. 2021), there remains a gap in reaching the intended audience effectively. Instead, the current evidence demonstrates individuals likely encounter mixed messages from influencers, microcelebrities, and IPED coaches, with some advocating responsible practices while others promote high doses and risky behaviors. This partly stems from the notion that information and its provision is largely left unchecked and falls outside of governmental support. We believe this highlights the need to reassess the broader engagement strategy to ensure that reliable information reaches people who use IPEDs and effectively addresses their needs and concerns.

Discussion

The aim of this study was to explore how IPED suppliers perceive the current market and their roles within it. The data revealed that cultural narratives, propagated through social media and online forums, are perceived to drive the demand for specific types of AAS, shaping consumer behavior and highlighting emerging patterns of supply. The findings also suggest that IPED suppliers may also “drift” into a hybrid role whereby they provide advice and guidance to the people who purchase IPEDs during the point-of-sale. This shift underscores the complex interplay between societal norms, individual behaviors, and the dynamics of the illicit AAS market – with suppliers playing an important role within the provision of IPEDs, information and advice. Given the global accessibility to IPEDs is on the rise (Cox, Gibbs, and Turnock 2023; Turnock et al. 2023), with shifting patterns of supply present (Van de Ven et al. 2018; van de Ven, Dunn, and Mulrooney 2020), research on these practices is essential for understanding the potential harms and implications for IPED use and supply globally. For instance, while discussions surrounding AAS often remain generalized, there is a growing recognition, particularly regarding compounds like trenbolone (Underwood 2022; Piatkowski et al. 2023; Lamb et al., 2024). The fact that AAS consumers seek out compounds like trenbolone, dihydroboldenone, or fluoxymesterone suggests that messages about these drugs being effective are pervasive, potentiated by the fact that adequate risk messages regarding AAS use often fail to reach consumers. This is believed to be due to factors such as stigma (McVeigh and Bates 2022), inadequate healthcare provider knowledge (Dunn 2022; Dunn et al. 2023), and the legal status of IPEDs in many nations (Piatkowski, Gibbs, and Dunn 2024). Furthermore, the narratives of media surrounding IPEDs, as well as general public opinion, tend to stereotype IPED consumers and potentiate stigma (James and Wynn 2022; McVeigh and Bates 2022). Collectively, this drives IPED consumption further underground and away from healthcare professionals, meaning people are less informed and likely to fall prey to cultural narratives surrounding particular AAS.

Drawing upon social power theory (French and Raven 1959), we understand how influential individuals in IPED communities shape drug use behaviors. While some individuals may promote safer practices, others highlight certain AAS as being superior, essentially placing them on a pedestal and potentially driving curiosity and risky behavior due to this increased focus. Anecdotal reports often overshadow the absence of tangible before-and-after blood work assessments, making it challenging for general people who use IPED to discern potential risks. For example, scientific literature concerning fluoxymesterone's hepatotoxicity remains scarce (Beg, Siddique, and Afzal 2007; Fürstenberger et al. 2012), with limited mention beyond sporadic case reports. While dihydroboldenone has demonstrated an increase in liver weight in animal models (Friedel et al. 2006) and anecdotal evidence suggests inflammation in humans, the lack of robust

empirical data undermines its justification for use, especially considering the availability of alternative AAS options with comparable effects but fewer adverse effects, such as testosterone (Eu et al. 2023). However, the allure of substances like trenbolone (Piatkowski et al. 2023) and, from these findings, fluoxymesterone and dihydroboldenone, persists despite the lack of concrete scientific evidence regarding their efficacy and safety. Lengthy video discussions on specific AAS superiority can fuel interest among people who use AAS seeking optimal gains, clouding their judgment and ability to make informed decisions. Concern arises when online content promotes specific substances without prioritizing consumer wellbeing or implementing adequate safeguards for the people who might consume this information online and implement it within the real world. Therefore, it is imperative to examine this intersection and contemplate the next steps. Open and transparent conversations are necessary to reduce stigma and ensure that individuals are equipped with accurate information about the risks and benefits associated with different IPEDs. It is also important that this information reaches the intended consumer group.

Considering the current landscape for IPED consumers, where conventional healthcare providers frequently struggle to connect with this consumer group due to stigma and a lack of understanding (Bates et al. 2022; McVeigh and Bates 2022; Piatkowski et al. 2024; Piatkowski, Gibbs, and Dunn 2024; Richardson and Antonopoulos 2019), IPED coaches and educators emerge as potentially “under-leveraged” links to community harm reduction (Gibbs, Cox, and Turnock 2022; Piatkowski et al. 2024). This gap stems from the distinct nature of IPED-related issues, which differ from typical medical conditions, posing challenges for specialized guidance (Atkinson et al. 2021; Grant et al. 2023). Expanding on this, there is an opportunity to collaborate more closely with IPED coaches and educators, as well as to promote public health messages and other initiatives within the community. By partnering more closely with community, we can promote harm reduction evidence which is scientifically based. Moreover, using targeted engagement strategies, partnered work in this space can facilitate access to content that is both salient and also provides effective risk reduction strategies for IPED consumers. This approach not only strengthens the connection with the community but also acknowledges the longstanding ethnopharmacological knowledge within it, by consumers drawing on an extensive understanding of pharmacological properties, dosages, administration methods, and effects (Fraser et al. 2020; L. Monaghan 2002).

Limitations

While this research provides valuable insights, it is important to acknowledge its limitations. The study’s sample size was small, consisting only of participants from Australia, which may limit the generalizability of the findings to a broader global context. However, it is worth noting that accessing the IPED community and IPED manufacturers and suppliers for research purposes can be challenging due to their secretive nature. This study represents a pioneering effort to explore the intricate dynamics of relationships between consumption, supply, and coaching within this community.

Conclusions

Our research sheds light on the way IPED suppliers perceive the cultural narratives which may be driving elements of the underground market, particularly the increasing demand for specific types of AAS such as trenbolone. The allure of these compounds appears to be fueled by societal perceptions of their desirability, perpetuated by social media influencers and micro-celebrities. Despite warnings about the potential psychosocial and health risks associated with these drugs, individuals continue to prioritize their acquisition. The role of suppliers, who may assume hybrid roles in providing IPED-related services, further complicates the landscape of use. Our findings underscore the urgent need to address the cultural narratives surrounding IPED use and provide comprehensive education and support to individuals navigating these complex dynamics. This includes promoting “steroid literacy”

to enhance community and end-user understanding of the risks and benefits associated with AAS use. Moreover, efforts should focus on ensuring that reliable harm reduction advice reaches people who use these drugs.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Timothy Piatkowski research philosophy is deeply rooted in the principles of harm reduction, emphasising the importance of promoting safety and informed decision-making regarding illicit substance consumption. Tim's research focuses on reducing harms among people who use image and performance enhancing drugs (IPEDs).

Steve Vigorous is an internationally recognized performance enhancement educator and expert, actively coaching competitive and non-competitive bodybuilders since 2013. He provides guidance through coaching, consultations, and via his many social media platforms.

Luke Cox is a researcher with interests in the ethics of anti-doping policy, IPEDs, and harm reduction. His work focuses on promoting safe practices and informed decision-making within the sports and fitness communities.

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