The measured adverse effects of PIEDs use – what is real and what is over-stated?
Measured adverse effects data from the PUSH audit

Presenting author: Beng Eu

BENG EU1, KEVIN LEE2, MATTHEW DUNN3, SCOTT GRIFFITHS4, DAVID BAKER6, MARK BLOCH7, CLARA SOO8, FIONA BISSHOP9, BELINDA WOZENCROFT10, JOSHUA DAWE5, MARK STOOVÉ5,

1Prahran Market Clinic, Prahran, Australia, 2Monash University, Melbourne, Australia, 3Deakin University, Melbourne, Australia, 4University of Melbourne, Melbourne, Australia, 5Burnet Institute, Melbourne, Australia, 6East Sydney Doctors, Sydney, Australia, 7Holdsworth House Sydney, Sydney, Australia, 8Hobart Place General Practice, Canberra, Australia, 9Holdsworth House Brisbane, Brisbane, Australia, 10View St Medical, Perth, Australia, 11University of NSW, Sydney, Australia

Presenter’s email: beng@prahranmarketclinic.com

Introduction and Aims: Performance and image enhancing drugs (PIEDs) use and its associated adverse effects has been little studied in Australia in a general population context. Most of what is known is presentations of severe adverse events - often to an acute emergency setting. This study aims to present data about measured adverse events in a population of people attending GP Clinics who use non-prescribed PIEDs.

Design and Methods: The PUSH audit is a cross-sectional audit done from the perspective of the GP from 9 clinics across Australia. Data recorded include haemoglobin, liver function, renal function, lipids, serum testosterone and blood pressure from 173 people. Comparison is made with 217 men who are prescribed testosterone.

Results: There was a significantly higher incidence of abnormal liver function in this group (43% v 25%) and the LFT results were also significantly more abnormal (p<0.005). There were also higher levels of testosterone and blood pressure(p<0.005). However, triglyceride and HDL levels were better in this group (p<0.005). There was no difference in the median haemoglobin results, abnormal HB results or renal function between the groups. Details of the clinical significance of these findings will be presented.

Discussions and Conclusions: This audit demonstrates the measurable adverse effects that can result from non-prescribed PIEDs use. These adverse effects need to monitored closely to prevent any severe effects on their health. However, some of the expected adverse effects may be mitigated by healthier lifestyles in this population.

Implications for Practice or Policy (optional): Known adverse effects need to be monitored for in people who use PIEDs. Not all adverse effects are severe. This audit showed the adverse effects that should be monitored.

Implications for Translational Research (optional): Active monitoring for these side effects and also testosterone levels.

Discussion Section: This symposium will represent a unique opportunity for participants to see research results from an Australian study. There has been no previous comparable study. As 3 of the authors of this work will be present, there will be opportunity to discuss the history and background of this research, as well as the design and the analysis of the data.
Participants’ ideas, questions and debate will also inform the research team about other questions that this data may be able to answer which can also inform future research ideas. Participants can contribute to the future direction of research in this filed. There will be expected discussion about how representative this sample was to the population of people using non-prescribed PIEDs and the clinical significance of the findings. There will also be discussion about how this data can be used in harm minimisation efforts in people working in this field.

**Discussant:** The Chair will lead the discussion

**Discussant’s email:** beng@prahranmarketclinic.com

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