

UK Military Veterans: Performance and Image Enhancing Drugs Use

Dr Ian Whyte

Dr Emily Pattinson

Dr Sandra Leyland

Professor Istvan Soos

Professor Jonathan Ling



Overview of Project

▶ Two studies: Two aims

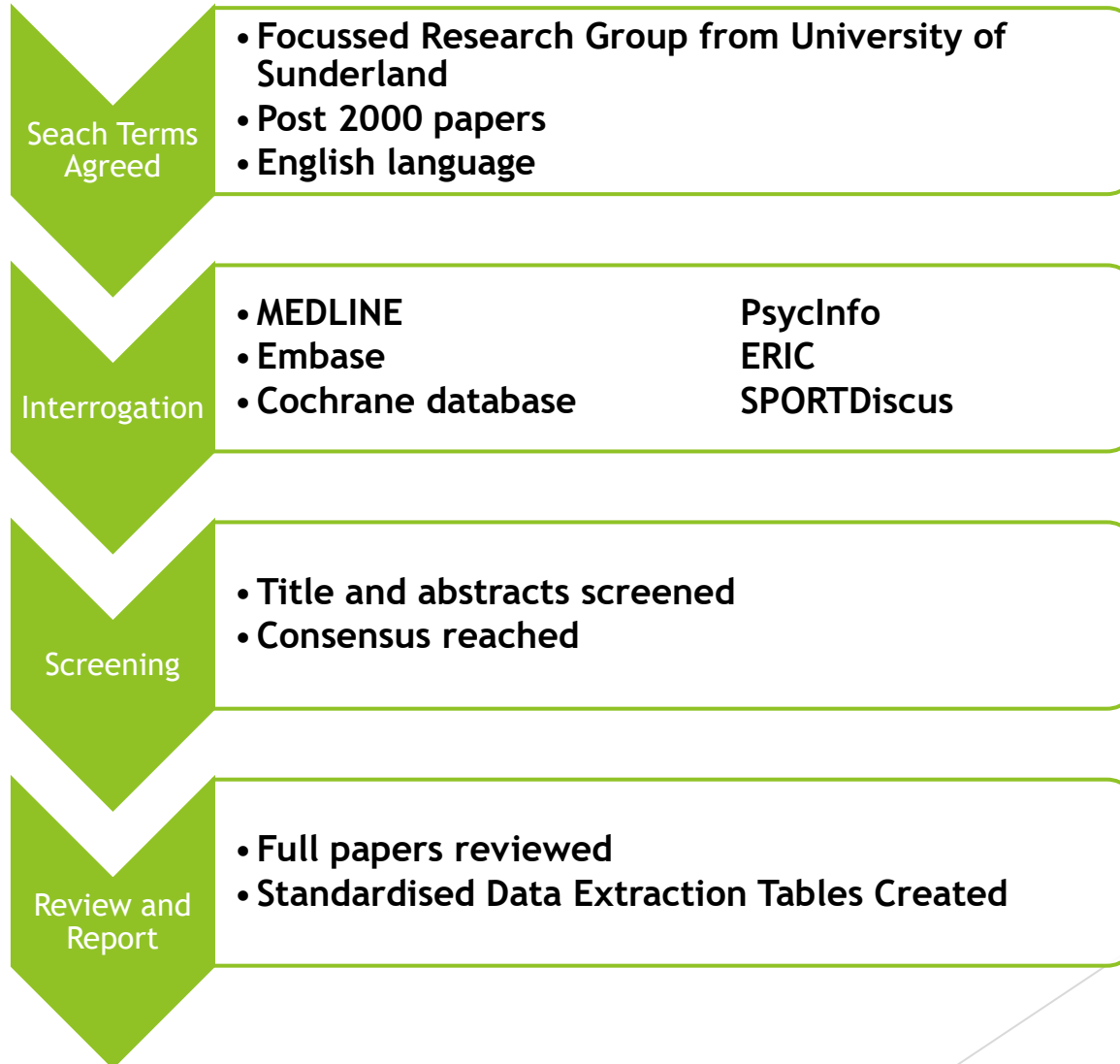
▶ Study 1 – Systematic review of the literature

- ▶ Aim: To identify and systematically review the literature around PIEDS use among in- and ex-Service personnel

▶ Study 2 - Qualitative semi-structured interviews with former UK Service personnel

- ▶ Aim: To identify issues related to PIEDS use among a sample of UK ex-Service personnel.

Study 1. Systematic Review of Literature



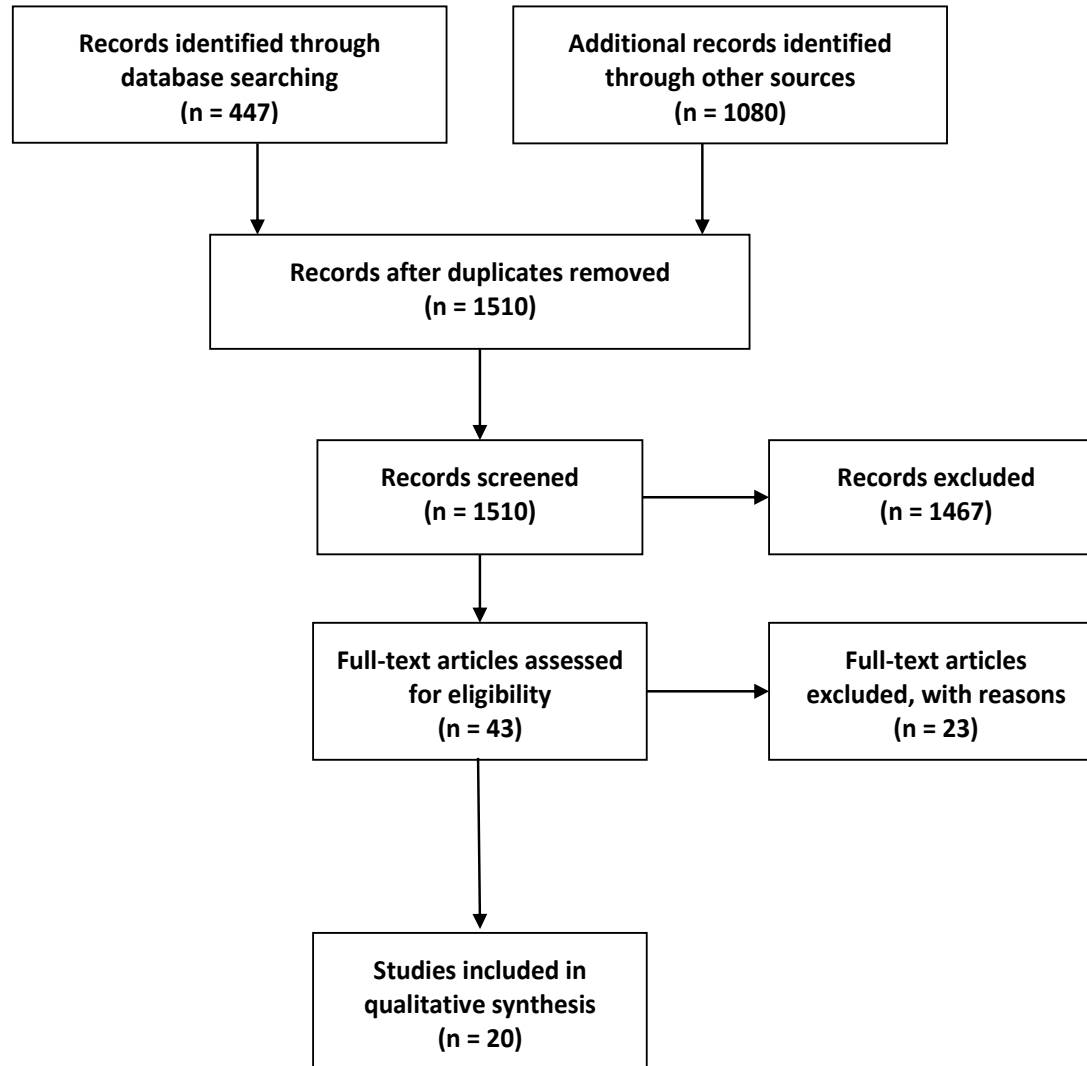
Study 1. Systematic Review of Literature - FINDINGS

Identification

Screening

Eligibility

Included



Papers represented:

- ▶ USA (14); UK (2); Australia (2); Hungary (1); Finland (1)
- ▶ Only one paper related specifically to veterans (case study n=1); two papers reflected former and serving personnel; the remainder were of serving personnel
- ▶ Questionnaire based (12 papers); case studies (7 papers)



Study 1. Systematic Review of Literature - FINDINGS

- ▶ **PIEDS use prevalent across all forces at all levels (8 -10%)**
- ▶ **Use of PIEDS takes place before, during and after deployment**
- ▶ **Usage may be condoned in certain circumstances (combat zones)**
- ▶ **Users see PIEDS as being necessary/acceptable to meet the physical and psychological demands of the job**
- ▶ **Early users (basic training) feel need to cope with training and physical fitness testing or selection for transfer to other areas of the forces**
- ▶ **User awareness is high about PIEDS potential impact on physical health but less so on mental health**
- ▶ **Younger age; lower ranks; males are main users**
- ▶ **Amongst MEN Anabolic steroids, bodybuilding supplements, and hormone boosters (e.g. HGH) were the main PIEDS taken; amongst WOMEN Weight Loss Supplements are most noted**

Study 1. Systematic Review of Literature - FINDINGS

- ▶ **Motivations for taking PIEDS?**
 - ▶ Image enhancement; muscle growth,
 - ▶ Keeping up with others;
 - ▶ Keeping up with the physical demands of combat;
 - ▶ Peer pressure / influence of others
- ▶ **When started?**
 - ▶ Basic training
 - ▶ Following break e.g., injury or leave
- ▶ **Where did users get PIEDS?**
 - ▶ Online; or local suppliers
 - ▶ On deployment – local suppliers – Basra, Kuwait, Germany

Systematic Review - Final Stages

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ORIGINAL ARTICLE

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Performance and image enhancing drugs use in active military personnel and veterans: A contemporary review

Ian Whyte¹ | Emily Pattinson² | Sandra Leyland¹ | Istvan Soos³ | Jonathan Ling¹

¹Faculty of Health Sciences and Wellbeing, University of Sunderland, Sunderland, UK

²School of Healthcare, University of Leeds.

Abstract

The use of performance and image enhancing drugs (PIEDs) among active mili-



Study 2. Semi-Structured Interviews

- ▶ **Sampling**
 - ▶ Purposive sampling was employed with 'snowballing' and use of gatekeepers
- ▶ **Inclusion criteria**
 - ▶ Ex-service personnel who are/were users of PIEDS.
 - ▶ Recruited from any of the three UK Armed Forces,
 - ▶ Any age group
 - ▶ All ranks
 - ▶ All genders
- ▶ **Ethics approval (University of Sunderland)**

Participant Characteristics

Personal history

Average age	30.7 years ± years
Average years in the armed forces	10.7 years ±
Services in which served	Army 57% Navy 43% RAF 0
Gender	Male 93% Female 7%
When started taking PIEDS	Pre-service 7% During service 28% Post-service 64%

Type of PIEDs taken

Steroids	100%
Growth Hormone	70%
Diuretics	21% (all bodybuilders)
Amphetamines	45%

How were PIEDS administered

Injectables	100% (all self-administered)
Oral	56 % (diuretics and amphetamines only)



Study 2. Semi-Structured Interviews

► Results of Thematic Analysis:

- Thematic analysis was conducted supported by NVivo 12 software. Data was tagged, listed, compared and clustered

Meaning Units N = 778

Themes N = 62

Categories N = 17

General Dimensions N = 5

- Inter-rater reliability checks were conducted reaching 83% congruence of resulting themes

General Dimensions (derived from 62 themes, 17 categories)

Introduction
to PIEDS

Knowledge
Sources of
PIEDS

Motivation to
Take PIEDS

Health and
Fitness
Consequences

Risk Taking
and Safety



Introduction to Taking PIEDS

Cultural artefacts of services

People

Previous history of substance use

We were 'beasted' for the sake of it...the only way to get through it was to take stuff

Just talking to others, like, they would say, if you want to get there fast then you need some gear

I never injected before but have taken supplements for years...creatine, amino acids, recovery powders...

**Motivation
to take PIEDS**

**Fitness
gains**

I wanted to be stronger, much stronger. I wanted to be the strongest lifter in the gym

**Size Gains
(be bigger)**

One day walking past some girls I heard one of them say, "Look at the size of his guns." That did it for me, it was always about getting bigger after that

**Body
image**

There are mirrors everywhere. I just wanted to look good in them and as I got bigger I always glanced at them and loved the way I looked ... in windows, passing cars. It made me feel great

**Work
demands**

The job is tough and I need to look tough and like I can handle myself. It stops bother before it starts. Looking big is part of it and being able to push people around too if necessary



Knowledge sources of PIEDS

Fitness related

PIEDS

'Medical' issues

That first 3 or 4 months was like a rocket journey. I picked up loads about my body and the right training, how to plan and load ... mostly from mates or others in the gym.

Other lads tell you what they know but you start to learn to get it confirmed on the web ... on forums. Loads of great info out there.

My first injections were from one of the other lads ... took it in the a** ... no, I've never asked a doctor

Health and Fitness Consequences

Physical benefits

Massive differences ... muscle bulk seemed twice as big, lifting twice as heavy and could do it more often

Perceived mental health benefits

The stronger and bigger I got the better I felt ... I was like strutting about showing off ... proud of me and my body

Negative physical consequences

I've not had many problems ... infection at the injection sites, a UTI, but not sure if related, muscle injuries with pushing too hard. Heard that a couple of lads died though ... heart!

Perceived negative mental consequences

I was an easy going type of guy but started to get annoyed easy ... a bit at first then more often. It turned into anger then violence. I could always justify the violence as retaliation

Risk Taking and Safety

Purchasing

No idea about the quality of what I'm taking. I never see the suppliers, they are in Liverpool but the go between is a boy in my gym so he has used with them for ages and I trust him that the gear is good and clean

Consumption

I self-inject, usually in the ass or just above it in the fatty bit and into the muscle. It was sore the first few times but just told myself to stop being a pussy and get on with it. It was a mate that showed me how to do it at first.

Managing consumption

I cycle a lot. Not on a bike (laughs). I take my pharms in chunks. I'll use one steroid like decas (Deca Durabolin) for about 5 or 6 weeks, then move to another like sussies (Sustanon) for another 5 or 6 weeks before moving to trenz (Trenbolone) and so on.

Implications of PIEDS Study

- **First known study to explore PIEDS use in former UK Service personnel**
- **Limitations to our study e.g. sample size, difficult to generalise**
- **Findings suggest that there are multiple reasons for taking PIEDs which only differ from general population contextually (those who started using PIEDS in active service)**
- **Overseas deployments offer a mixture of motive and opportunity as does some of military culture**
- **Taking nutritional supplements is a major gateway to illegal drugs use**
- **Challenges are to prevent gateways from opening up, and to ensure support can be accessed without fear of stigma or career limitation**

Summary: FiMT Projects

- ▶ **Value of a diverse research agenda, covering substances and cohorts that have received little attention thus far**
- ▶ **Drawn out the impact that cultural elements of the Armed Forces can have on substance use behaviours, both during and after service, and on seeking help for those behaviours**
- ▶ **Education both during and prior to leaving service seems one positive approach identified across the three projects as a counter to internal and external influences**

Other FiMT Funded Work:

- ▶ **FiMT funded report by the University of Liverpool and King's College London on 'Help seeking for alcohol problems in UK military personnel' to be released during Alcohol Awareness week (17th November), which explores the roles of problem recognition and mental health comorbidity.**

laura.goodwin@liverpool.ac.uk

Other work - Brand Awareness

FiMT supported project

- ▶ **Drinks:Ration** (www.drinksration.app) is an app designed by veterans for veterans to support reductions in alcohol consumption. The core elements are:
 - ▶ **Personalised:** Drinks:Ration provides tailored support to help veterans cut down the amount they drinking by learning drinking behaviours;
 - ▶ **Responsive:** Drinks:Ration automatically detects changes in drinking behaviours and provides real time tailored support to help veterans cut down;
 - ▶ **Secure:** Drinks:Ration gives users control of their data and privacy focused.
- ▶ **RCT** for which they are trying to recruit in sufficient numbers (it seems drinking behaviours have changed somewhat over COVID with veterans drinking less as they can't socialise, and aren't drinking at such high levels on their own). daniel.leightley@kcl.ac.uk