



TEXAS TECH UNIVERSITY
Health Sciences Center
Paul L. Foster School of Medicine

ETHICS AND EROGENIC AIDS

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ETHICS – A FEW THOUGHTS

Ethics are not just the result of reactions i.e. they are not only derived from modeling, emulation, habit and result (BF Skinner like model)

Ethics must include reflection, evaluation, choice and conscious intentethics are a result of free will



LEVELS OF ETHICAL PRACTICE

Mandatory Ethics – a level of ethical functioning wherein an individual merely act in compliance with minimal standards, acknowledging the basic “musts” and “must nots.”

Aspirational Ethics – describes the highest standards of conduct to which professionals can aspire and requires that professionals do more than simply meet the letter of the code of ethics.





FIVE SOURCES OF ETHICAL STANDARDS

UTILITARIAN APPROACH

The Greatest Balance of good over harm for all.



RIGHTS APPROACH

Protects and respects the moral rights of those (all) that are affected

Resides on the premise that people can choose freely what they do with their lives



FAIRNESS OR JUSTICE APPROACH

First discussed by Aristotle (followed by the Greeks)

Treat all humans equally....or if not equally fairly based on some standard

Ex. Pay for performance



COMMON GOOD APPROACH

First used by the Greeks

Interlocking relationships in society are the basis of ethical reasoning and that respect and compassion, especially for the vulnerable, are requirements to this approach




VIRTUE APPROACH

This is also an ancient approach

Examines the “virtue” of an action as defined by society and self.


The action is a reflection of the individual i.e. If I do this, what kind of person does that make me or Is this me at my best?






**A FRAMEWORK FOR ETHICAL
DECISION MAKING**
ETHICS IN SPORTS

RECOGNIZE AN ETHICAL ISSUE

- 1. Is there something wrong personally, interpersonally, or socially? Could the conflict, the situation, or the decision be damaging to people or to the community?**
 - 2. Does the issue go beyond legal or institutional concerns? What does it do to people, who have dignity, rights, and hopes for a better life together?**
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GET THE FACTS

3. What are the relevant facts of the case? What facts are unknown?
 4. What individuals and groups have an important stake in the outcome? Do some have a greater stake because they have a special need or because we have special obligations to them?
 5. What are the options for acting? Have all the relevant persons and groups been consulted? If you showed your list of options to someone you respect, what would that person say?
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EVALUATE ALTERNATIVE ACTIONS FROM VARIOUS ETHICAL PERSPECTIVES

6. Which option will produce the most good and do the least harm?



UTILITARIAN APPROACH: THE ETHICAL ACTION IS THE ONE THAT WILL PRODUCE THE GREATEST BALANCE OF BENEFITS OVER HARMS.

7. Even if not everyone gets all they want, will everyone's rights and dignity still be respected?



RIGHTS APPROACH: THE ETHICAL ACTION IS THE ONE THAT MOST DUTIFULLY RESPECTS THE RIGHTS OF ALL AFFECTED.

8. Which option is fair to all stakeholders?



FAIRNESS OR JUSTICE APPROACH: THE ETHICAL ACTION IS THE ONE THAT TREATS PEOPLE EQUALLY, OR IF UNEQUALLY, THAT TREATS PEOPLE PROPORTIONATELY AND FAIRLY.

9. Which option would help all participate more fully in the life we share as a family, community, society?



COMMON GOOD APPROACH: THE ETHICAL ACTION IS THE ONE THAT CONTRIBUTES MOST TO THE ACHIEVEMENT OF A QUALITY COMMON LIFE TOGETHER.

10. Would you want to become the sort of person who acts this way (e.g., a person of courage or compassion)?



VIRTUE APPROACH: THE ETHICAL ACTION IS THE ONE THAT EMBODIES THE HABITS AND VALUES OF HUMANS AT THEIR BEST.

Make a Decision and Test It

- 11. Considering all these perspectives, which of the options is the right or best thing to do?**
- 12. If you told someone you respect why you chose this option, what would that person say? If you had to explain your decision on television, would you be comfortable doing so?**

ACT, THEN REFLECT ON THE DECISION LATER

13. Implement your decision. How did it turn out for all concerned? If you had it to do over again, what would you do differently?



WHY SHOULD WE BE CONCERNED ABOUT SUBSTANCE ABUSE IN SPORTS?

It really does occur

Physical side effects/Morbidity/Mortality

Health care costs

Impacts on the athlete

Ethical and legal considerations



SUBSTANCE ABUSE AND THE ATHLETE

Poor individual performance

Unavailability to the team

Impact on team performance

Damage to the integrity of the individual/team

Illness

Death

Legal Issues



SUBSTANCE ABUSE AND THE ATHLETE

Many young athletes train for competition and not for health

- May view the risk to benefit ratio of ergogenic drugs/aids as favorable
 - Begin using at early age

The Ideal: Winning simply through training and ability, BUT often not the reality

- Athletes will try things despite known serious side effects, no evidence of efficacy, substance on the banned/prohibited list

SUBSTANCE ABUSE AND THE ATHLETE

Drug policies attempt to level the playing field

Policies are targeted towards substances that:

- May be dangerous
- Are illegal
- Give an unfair competitive advantage

ACSM: Anabolic steroids are unethical, have dangerous side effects, their use should be deplored. (ACSM, 1987)

SUBSTANCE ABUSE AND THE ATHLETE

Athletes will continue to use ergogenic aids and banned substances until adequate testing methods and protocols can be devised.

One of the biggest obstacles in the fight vs. doping is the wide variety of standards.

- World Anti-Doping Agency (WADA) Code best chance for reform
- Ideal: all athletes undergo random testing with a unified set of testing standards, banned substances and penalties

DUBIN COMMISSION (CANADA) ON STEROIDS IN SPORT

Using banned substances to improve physical performance is cheating

Drug use has threatened the integrity of sport

Drug use erodes moral and ethical values

Drug use demoralizes the entire sport community



DEFINITIONS RELATED TO SUBSTANCES USED/ABUSED IN SPORTS

Ergogenic Aid

- Item designed to increase work or improve performance above that of regular training and diet
 - Supplements; Pro hormones; Drugs; etc.

Doping

- Use of performance-enhancing drugs or techniques, particularly those forbidden by regulating organizations


DEFINITIONS RELATED TO SUBSTANCES USED/ABUSED IN SPORTS

Banned/Prohibited/Restricted

- Not allowed to be used per a governing body
 - National Center for Drug Free Sport (NCAA)
 - Banned
 - Restricted; may be used under special circumstances
 - United States Anti-Doping Agency (USOC; WADA)
 - Prohibited


DEFINITIONS RELATED TO SUBSTANCES USED/ABUSED IN SPORTS

Illegal

- Prohibited or not authorized *by law*
 - Consequences may lead to fines, probation or prison time
 - Some banned/restricted substances are also illegal
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DEFINITIONS RELATED TO SUBSTANCES USED/ABUSED IN SPORTS

Illegal Drugs

- Affect the health of the athlete
 - Taking of drugs inappropriately is against the spirit of sport
 - Difficult to defend an athlete choosing to break antidoping laws of a sport's governing body as well as criminal laws
 - Care is needed to separate the punitive aspect of drug use from the therapeutic care for the athlete's problem
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DEFINITIONS RELATED TO SUBSTANCES USED/ABUSED IN SPORTS

Prescribed drugs

- Medications advised for an athlete, by prescription, from a licensed physician, dentist, or other health care provider
 - Even though it is prescribed, a medication may still be a banned or restricted substance

DEFINITIONS RELATED TO SUBSTANCES USED/ABUSED IN SPORTS

Over the Counter Medications (OTC)

- Athlete's may take these on their own or per direction of a health care provider
 - Even though it does not require a prescription, an OTC medication may still be a banned or restricted substance
- Athletes need to be warned they are ultimately responsible for what they ingest, contaminated or not;
Inadvertent Doping



The Dietary Supplement
Resource Exchange Center

Why Risk It?

For Free, Confidential
information on dietary
supplements or banned
substances, contact
The REC.

***IGNORANCE
IS NO
EXCUSE!***

www.drugfreesport.com/rec

The REC is a service provided by The
National Center for Drug Free Sport
for organizations that subscribe.



DEFINITIONS RELATED TO SUBSTANCES USED/ABUSED IN SPORTS

Natural Products/Supplements

- 1994 Dietary Supplement Health and Education Act (DSHEA)
 - Substances can be sold without US FDA approval if labeled as dietary supplements and are not claimed to be a drug
 - Content and purity not regulated
- Products may not be fully labeled with all ingredients; contamination may occur

DEFINITIONS RELATED TO SUBSTANCES USED/ABUSED IN SPORTS

Illegal use of therapeutic substances

- Androgenic/anabolic agents
- Erogen
- Medications used to mask urine samples
 - Diuretics
 - Anti-estrogens
 - Probenacid

Recreational Drugs

- Alcohol -Tobacco
- Marijuana -Stimulants
- Hallucinogens

ERGOGENIC AIDS

Items designed to increase work or improve performance above that of regular training and diet.

- Mechanical
- Psychologic
- Physiologic
- Pharmacologic
- Nutritional

ERGOGENIC AIDS

- Mechanical
 - Running shoes
 - Psychologic
 - Eating deer liver or lion heart
 - Physiologic
 - Fluids
 - Blood
 - Pharmacologic
 - Requiring prescription
 - Illegal
 - OTC
 - Nutritional
 - Supplements
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ERGOGENIC AIDS

Six components of physical fitness may be affected

- Aerobic metabolism
- Anerobic fitness
- Strength
- Body composition
- Psychologic factors
- Healing of injuries

BANNED/PROHIBITED SUBSTANCES

NCAA Banned Drug Classes

www.ncaa.org/health-safety

- Click on Drug Testing in the left hand column

OR:

http://www1.ncaa.org/membership/ed_outreach/health-safety/drug_testing/banned_drug_classes.pdf

- Testing is done through National Center for Drug Free Sport

CREATINE

British Sprinter Linford Christie – won gold at the 92 Olympic games in the 100 M - he was 32 yo.

Creatine combines with phosphate to form creatine phosphate which in turn rephosphorylates ATP

So great for rapid movement sports – sprint or burst sports

Comes from eating meat

Lab studies have looked good but on field studies have not panned out well

ACSM – no use <18 yo

Consider kidney issues (not seen in health young athletes but in others and in dehydration) – so lots of water is a must

CAFFEINE

WADA removed it from it's list but

NCAA – limits caffeine to 15 micrograms /millimeter in urine (8 cups of coffee or 18 soft drinks a day) (Or a venti coffee with a espresso or Italian shot)

In addition to being a stimulant – it's believed that caffeine aids in the NA- K pump action and increases triglyceride oxidation – sparing glycogen

EPIGALLOCATECHIN GALLATE

Was the response to the banning of ephedra

Naturally occurs in green tea

Increases fat oxidation by increasing norepinephrine levels through inhibition of the enzyme catechol-O-methyltransferase that degrades catecholamine

Taken for centuries in green tea – but not at the current doses –

Studies show possible liver toxicity



NITRIC OXIDE

A huge explosion in the athletic world\$80 for a one month supply

Believed to increase aerobic capacity by 8-9%

No true research showing its use as an ergogenic aid

OTHER FAMOUS ERGOGENIC AIDS

Human growth hormone – you can get it at any popular gym in El Paso . Obvious health risks

Testosterone and Testosterone boosters or “stacks” – obvious problems

CASE 1

A 44 yo female comes into your office and states that she has lost 12 lbs and is feeling great – she states that she has started a supplement called HGH....she states that she would like to continue with it What should you do



CASE 2

A male triathlete (amateur) athlete (32 yo) comes to your office secondary to a sprained ankle ... during the interview you find that he is using creatine as an ergogenic aid ... what would you do as this patient's PCP????

CASE 3

20 yo NCAA athlete comes in to see you for his annual physical – he has a long hx of asthma and is controlled on advair and albuterol Is there any concern here – if so what should be done ????



THANK YOU

PLFSOM SPORTS MEDICINE