Controversial Topics in Gambling: Alberta Gambling Research Institute's 13th Annual Conference

Aitchison, Katherine J.; Castellani, Brian; Chapman, Craig S.; Christensen, Darren R.; Crawford, Sandy; Currie, Cheryl; Downs, Carolyn; Euston, David; Forrest, David; Goodyear, Bradley G....

http://hdl.handle.net/1880/49991
conference proceedings

Downloaded from PRISM: https://prism.ucalgary.ca
Using a Public Health Lens

To Examine Responsible Gambling Initiatives

Cheryl Currie, PhD
AIHS Translational Health Chair & Assistant Professor of Public Health, University of Lethbridge
What is done to resolve a particular societal matter depends on how it is framed. (Korn, 2002)

- All Canadian provinces provide funds to promote responsible gambling
- But are we framing the matter in ways that guide effective action?
What is Public Health?

Science of prevention

To fulfill society’s interest in assuring the conditions in which people can be healthy.
Public Health Framework

Describe gambling in populations

Taking action – prevention & treatment

Determinants of gambling problems
Public Health has a Different Focus

Individual Focus
- Chasing losses
- Cravings to gamble
- Health problems
- Financial problems

Population Focus
- 844,000 Canadians are PGs (2.4%)
- Higher in males
- Prevalence lowest in Quebec, PEI & Nova Scotia
- Low levels of treatment seeking
Public Health Framework

Describe gambling in populations

Taking Action

Determinants of gambling problems
Determinants of PG

1. Biologic – Genetics, epigenetics
2. Environmental – Gambling environment
3. Individual – Personal choices, psychological mechanisms
4. Social – Poverty, unemployment, discrimination, childhood trauma
Public Health Framework

Describe gambling in populations

Taking Action

Determinants of gambling problems
Levels of Prevention

1. **Primary Prevention** – Prevent PG

2. **Secondary Prevention** – Catch preclinical PG symptoms early

3. **Tertiary Prevention** – PG treatment
Levels of Prevention

Symptomatic
Clinical phase of disease (PG)

Pre-Symptomatic
Early PG symptoms
Prevention Strategies
The Problem with an Educational Focus

Educational approaches to health promotion have proved disappointingly ineffective. (Gilliam et al. 2012).
Example – Montana Meth Project

45 000 TV ads, 35 000 radio ads, 10 000 print impressions, 1000 billboards

Education campaign portrays the consequences of meth use.
SCABS, HALLUCINATIONS, AND BODY SORES. THEN THINGS REALLY GO DOWNHILL.
NO ONE EVER THINKS THEY’LL WAKE UP HERE. METH WILL CHANGE THAT.

MONTANA METH PROJECT
1-888-366-8384

METH
NOT EVEN ONCE.
NotEvenOnce.com
MY MOM KNOWS
I’D NEVER HURT HER.

THEN SHE GOT IN THE WAY.

METH
NOT EVEN ONCE.

NotEvenOnce.com
Does information matter? The effect of the Meth Project on meth use among youths

D. Mark Anderson

Department of Economics, University of Washington, Box 353330, Savery 305, Seattle, WA 98195-3330, USA

ARTICLE INFO

Article history:
Received 23 December 2009
Received in revised form 14 June 2010
Accepted 15 June 2010
Available online 25 June 2010

JEL classification:
H75
I18
K42
M37

Keywords:
Methamphetamine use
Meth Project
Anti-drug campaigns
Youth

ABSTRACT

Are demand-side interventions effective at curbing drug use? To the extent demand-side interventions are successful, their cost effectiveness can be appealing from a policy perspective. Established in 1996, the Montana Meth Project (MMP) employs a graphic advertising campaign to deter methamphetamine use. Due to the MMP’s apparent success, seven other states have adopted Meth Project-like campaigns. Using data from the Youth Risk Behavior Surveys (YRBS), this paper investigates whether the MMP reduced methamphetamine use among Montana’s youth. When accounting for a preexisting decline in meth use, effects on meth use are statistically indistinguishable from zero. These results are robust to using related changes of meth use among individuals without exposure to the campaign. 

A complementary analysis of treatment admissions to the Treatment Episode Data Set (TEDS) confirms the MMP has had no discernable impact on meth treatment admissions.
“...the effects on meth use are statistically indistinguishable from zero.”

Campaign did not contribute to a decrease in meth use among youth.

To better guide the allocation of resources this study calls for a focus on the determinants of meth use.
1. Educating people on ‘how to behave better’ is **often not that effective** in eliciting lasting behaviour change.

2. Some education-based behaviour change theories are **popular**, but **not evidence-based**.
Editorial

Time for a change: putting the Transtheoretical (Stages of Change) Model to rest

Introduction

The Transtheoretical Model of behaviour change, known to many as the Stages of Change (SOC) model, states that with regard to chronic behaviour patterns such as smoking, individuals can be characterized as belonging to one of five or six 'stages' (Prochaska et al. 1985; Prochaska & Goldstein 1991; Prochaska & Velicer 1997). Stage definitions vary from behaviour to behaviour and across different versions of the model but in the case of smoking: 'precontemplation' involves an individual not thinking about stopping for at least 6 months; 'contemplation' involves an individual planning to stop between 31 days and 6 months, or less than 31 days if they have not tried to quit for 24 hours in the past year; 'preparation' involves the individual having tried to stop for 24 hours in the past year and planning to stop within 30 days (it has been accepted by the proponents of the model that having tried to stop should perhaps be dropped from this stage definition); 'action' involves the individual having stopped for between 0 and 6 months; 'maintenance' involves the individual having stopped for more than 6 months. In some versions of the model there is also a 'termination' stage in which the individual has permanently adopted the new behaviour pattern.

The model further proposes that individuals progress from one stage to the next through a series of steps. However, it is not always clear how these steps are defined or how they relate to one another. A readily accessible outline of the model and the assessment tools that accompany it see: http://www.uri.edu/research/cprc/transtheoretical.htm.

There are serious problems with the model, many of which have been well articulated (Etter & Perneger 1999; Bunton et al. 2000; Whitelaw et al. 2000; Sutton 2001; Etter & Sutton 2002; Littell & Girvin 2002). However, its popularity continues largely unabated. This editorial does not seek to revisit the plethora of empirical evidence and conceptual analysis that has been ranged against the model. It simply argues that the problems with the model are so serious that it has held back advances in the field of health promotion and, despite its intuitive appeal to many practitioners, it should be discarded. It is now time for a change. A replacement is needed that more accurately reflects observations about behaviour change, is internally consistent, and generates useful ideas and predictions. It needs to provide a way of describing how people can change with apparent suddenness, even in response to small triggers. It needs to be a stimulus to research that will go beyond a simplistic decision-making model of behaviour and produce genuinely novel insights. However, even in the absence of a new theory, simply reverting to the common sense approach that was used prior to the Transtheoretical Model would better than staying with the model. In that approach people would be encouraged to simply stop smoking, and then continue to work to prevent relapse.
What are the problems with educating people?

3. **New people** continue to enter the population at an unaffected rate - who then have to be educated on “how to behave better”

(Syme, 2008)
A shift in focus to reducing **incidence** not prevalence
Income Inequality & Mental Health

The diagram illustrates the correlation between income inequality and the percentage of the population with any mental illness. Countries with higher income inequality tend to have a higher percentage of individuals with mental illness. The graph uses data from various countries, including the USA, Canada, Australia, UK, New Zealand, France, Netherlands, Belgium, Japan, Germany, Spain, and Italy, showing a positive linear relationship between income inequality and mental health issues.
Determinants of PG

- Adverse Childhood Experiences
Gambling redistributes $$ randomly among participants.

How could gambling revenues be used to redistribute wealth in society and reduce social adversities?
Changing the Environment to Make Healthy Decisions Easy

How can we get people to use the stairs?
How can we structure the gambling environment

To make individual’s default decisions about gambling responsible?
Ideas - Changing the Environment

- Low maximum bet limits
- Mandatory pre-commitment of time or $$
- No bank machines in gaming venues
- Add windows, clocks on gaming floor
Finding the Right Balance

Gambling Profits

Social Responsibility
Prevention Targets
High-Risk Focus

Target: High-risk gamblers based on behaviour

Most responsible 2.15% 13.6% 34.1% 34.1% 13.6% 2.15%
Average gambling behaviour
Least responsible
Level of Prevention?

Symptomatic
Clinical phase of disease (PG)

Pre-Symptomatic
Early PG symptoms
Where do the High-Risk come from?

Most responsible

Average gambling behaviour

Least responsible
What Determines the Population Average?

The **mass influences** acting on the population as a whole

Most responsible

Average gambling behaviour

Least responsible
What Determines the Population Average?

The more widespread a cause, the less it explains the distribution of cases.

The hardest causes to identify are those causes that are universally present.

Most responsible: Average gambling behaviour: Least responsible

2.15% 13.6% 34.1% 34.1% 13.6% 2.15%
Comparing Populations
Average Blood Pressure

[Graph showing two distributions: one for Kenyan nomads and one for London civil servants.]

Link to full reference
Majority who commit murder are young and male in England and Chicago.

- **Causes of cases** of homicide between places similar.

Chicago - Incidence of homicide 30x higher.

- **Causes of incidence** of homicide between places is different.
What can be learned from other populations?

Causes of Cases
Similar in Alberta & Quebec

Causes of Incidence?

PG Prevalence

- Alberta: 8%
- Quebec: 2%
What is Our Question?

Why do some **individuals** have PG

Why do some **populations** have more PG?
Whole Population Target

After the intervention

Before the intervention

Level of risk exposure

Mean effect

Note. Arrows indicate where the lines of the distribution would be after a population-level approach.

Frohlich and Potvin (2008): Link to article
Developing a Framework for Responsible Gambling

1. **Focus**: Primary, secondary, tertiary prevention

2. **Strategies**: Emphasize those most likely to have an effect based on *scientific theory and evidence*.

3. **Targets**: Causes of PG cases or causes of PG incidence?
Finding the Right Balance

Gambling Profits

Social Responsibility
What is done to resolve a particular societal matter depends on how it is framed. (Korn, 2002)

Cheryl Currie, PhD
AIHS Translational Health Chair &
Assistant Professor, University of Lethbridge
cheryl.currie@uleth.ca