PARTY – does it work?

An overview of Royal Perth Hospital’s experience

Injury 2010, Auckland NZ

Maxine Burrell, Trauma Program Manager
Royal Perth Hospital, WA
Prevent Alcohol and Risk-related Trauma in Youth

“To promote injury prevention through reality education, enabling youth to recognize risk and make informed choices about activities and behaviours.”

(PARTY, 1998)
Introduction

- The scope of the problem - "The problem with youth today"
- What is PARTY?
- PARTY Perth
- Does PARTY work?
From this.... to this?
Health problems affecting youth disproportionately

- Accidental Injury
- Intentional Injury
- Mental Disorders
  - Depression; anxiety disorders; psychoses; eating disorders
- Substance abuse and dependence
Youth health problems

- Tobacco use
- Mental Health Problems
- Obesity
- Heavy alcohol use
- Illicit substance use
- Risky sexual behaviour
- Physical inactivity
- Poor diet
- Sun exposure
- Aggressive and antisocial behaviour
Adolescent health risk vs. major implications for later health

<table>
<thead>
<tr>
<th>Adolescent Health Problem</th>
<th>Cardiovascular Disease</th>
<th>Cancer</th>
<th>Mental disorders</th>
<th>Diabetes</th>
<th>Asthma</th>
<th>Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco use</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>Obesity</td>
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<td>✓</td>
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<td>Poor diet</td>
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<td>✓</td>
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<tr>
<td>Physical inactivity</td>
<td>✓</td>
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<tr>
<td>Heavy alcohol use</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Illicit substance use</td>
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<tr>
<td>Antisocial and aggressive behaviour</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td></td>
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<tr>
<td>Adolescent mental health problems</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Risky Sexual Behaviour</td>
<td>✓</td>
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<tr>
<td>Sun-exposure</td>
<td>✓</td>
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</tbody>
</table>

Legend:
- ✓: major risk factor for later illness
- ✓: moderate consumption may bring cardiovascular health benefits
- ✓: predicts poor outcome of disorder
- ✓: predicts later illness but arguably of less major importance

(Patton, 1999)
Western Australian Data

- 256 major trauma admissions to RPH in 2009 (54%) road trauma

- Almost 30% (29.7%) major road trauma admissions youth aged 15-24

- 2 x risk of transport injury death 15-24 age group  (Gillam et al, 2003)
### Australia – Road Toll 2008

(Australian Bureau of Statistics 2009)

<table>
<thead>
<tr>
<th>State</th>
<th>Deaths</th>
<th>State</th>
<th>Deaths per 100,000</th>
</tr>
</thead>
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<tr>
<td>NSW</td>
<td>397</td>
<td>NT</td>
<td>34.10</td>
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<td>QLD</td>
<td>327</td>
<td>WA</td>
<td>9.66</td>
</tr>
<tr>
<td>VIC</td>
<td>303</td>
<td>NZ Deaths</td>
<td>8.03</td>
</tr>
<tr>
<td>WA</td>
<td>NZ Deaths</td>
<td>366</td>
<td>8.6</td>
</tr>
<tr>
<td>SA</td>
<td></td>
<td>NZ Deaths per 100,000</td>
<td>7.64</td>
</tr>
<tr>
<td>NT</td>
<td></td>
<td>NSW</td>
<td>5.70</td>
</tr>
<tr>
<td>TAS</td>
<td></td>
<td>ACT</td>
<td>4.07</td>
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<tr>
<td>ACT</td>
<td>14</td>
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</tr>
</tbody>
</table>
Major road trauma admissions
RPH, 2009 (ISS>15)
Cause of Major Trauma (ISS >15) in Youth (15-24 yrs)

- Road Trauma: 76
- Assaults: 10
- Sporting/Recreational: 8
- Fall >3M: 7
- Fire/Explosion: 6
- Other/Unknown: 10
Annual Major Road Trauma Admissions (15-24 yrs)

Number of Admissions

Year | Admissions
--- | ---
2000 | 52
2001 | 53
2002 | 65
2003 | 65
2004 | 70
2005 | 69
2006 | 81
2007 | 70
2008 | 102
2009 | 76
What are the risks?

- P-Plate drivers $5 \times$ more likely to crash
- $8 \times$ more likely fatal injury passenger crash
Why?

Undeveloped skills:
- Cognitive
- Psychomotor
- Perceptual
Higher exposure to risk conditions:

- Nights and Weekends
- With peers (distractions/encouragement)
- Location – notably rural areas
- Risk-taking behaviour:
  - Speeding
  - Alcohol & drugs
  - Lack of seatbelt use
  - Inexperienced
Alcohol

- > 10% first year drivers illegal BAC
- ~ 30% of all drink drivers repeat offenders
- Majority male (90%) and < 25 years (65%)
- 2.3 times greater crash risk
- Drink driving associated with drug driving
Where do we fit in?

Office of Road Safety WA -
Towards Zero Road Safety Strategy:

*Getting there together 2008 – 2020*

- Safe roads and roadsides
- Safe speeds
- Safe vehicles
- **Safe road use**

{save 11,000 people

Drink and drug driving
Restraint use
Fatigue and distracted driving
Novice drivers - GDS
Motorcyclists, Pedestrians and Cyclists
Legislation
What is PARTY?
PARTY Mission Statement

“To promote injury prevention through reality education, enabling youth to recognize risk and make informed choices about activities and behaviours.”

(P.A.R.T.Y. 1998)
## Threat (stimulus)

<table>
<thead>
<tr>
<th>Fear (response to the stimulus)</th>
<th>Control (reaction to the fear)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhibitory (shock horror)</td>
<td>Fear Control (“it won’t happen to me”)</td>
</tr>
<tr>
<td>Anticipatory (“that will happen to me if I don’t change”)</td>
<td>Danger Control (“it can happen to me, but I can avoid the outcome if I adopt the prescribed action”)</td>
</tr>
</tbody>
</table>

(Higbee 1969, 1974)
Maladaptive Coping Responses

- Fatalism (‘Nothing I can do about it’)
- Avoidance (‘Don’t think about it and it will go away’)
- Religious faith reliance (‘God’s will or faith will get me through’)
- Inaccurate information beliefs (‘I’m always in control, I’m a better driver than average’)
- Denial (‘I haven’t had an accident in 5 years so why wear a seat belt’)

Negative Consequences

- **Physical** (death, disablement, disfigurement)
- **Social** (embarrassment, no friends)
- **Emotional** (guilt, loss of self-esteem)
- **Financial** (property loss or damage, loss of income source)
- **Loss of life style** (e.g. being in a wheelchair, no money because of loss of income)
- **Loss of freedom** (loss of licence, jail sentence, blindness, loss of limbs)
So in plain English...

- Thus the strategy is to convince them it can or will happen to them.
PARTY
Goals and Objectives

- To empower youth to recognise risks.
- To empower youth to make informed, smart choices.
- To increase youths’ awareness of personal responsibility for their choices.
- To increase youths’ knowledge of the impact of serious injury on quality of life for the individual and community.
In a nutshell...

- Knowledge
- Attitude
- Behaviour
Background

- Sunnybrook Health Sciences Centre, Toronto, 1986
- 70 sites across Canada, United States and Australia
- Licensed by SMARTRISK
- Perth, Melbourne and Brisbane
- (Germany)
Royal Perth Hospital’s PARTY

- School Students Years 10, 11 and 12
- 30 Students per session
- One session per week during school terms
- Each school one PARTY per year
- Outreach Programs
- Juvenile Justice ~ 6 times per year
- One staff day per year
Each session is conducted once a week

"I WON'T WEAR A HELMET
(Phan Dinh - Mental Age 2yrs)
IT MAKES ME LOOK STUPID"

Every year over 11,000 people die on our roads and 30,000 are seriously injured. That means thousands of families left picking up the pieces. Families tortured by the loss of a loved one, crippled by reduced income or the sudden need to care for a relative with permanent brain damage.
The sad truth is that 40% of these cases could have been prevented by simply wearing a HELMET. When you think about it, there are no excuses.

Sponsored by...
Tour

- Emergency Department
- Intensive Care Unit
- State Major Trauma Unit
Show it how it is....
Spinal Injuries and Rehab Unit

- Respiratory complications
- Lack of mobility
- Bladder dysfunction
- Bowel dysfunction
- Sexual dysfunction
- Pain
- Psychological considerations
- Loss of independence
Paraplegic Benefit Fund (PBF)

Anton Zappelli
‘A car for me was a toy, something to have fun in, play with, not something serious”

Anton became a paraplegic when he allowed his girlfriend to drive his car when she did not have a licence. Not long after she began driving, she lost control of the car on the dirt road and it overturned, landing on its roof.
Acknowledgements

Patients and their families
Emergency Dept nursing and medical staff
ICU nursing and medical staff
ICU Equipment PCA
Trauma Unit
Orthopaedic ward nursing staff
Neurological ward nursing staff
Trauma Resident
Patient Support Services
St. John Ambulance
Injury Survivors
Paraplegic Benefit Fund (Australia)
Ward XI
Physiotherapy
Clinical Psychology/Pastoral Care
Security
Catering Department
Trauma Registry
Facilities Management
But does PARTY work?

OUTCOMES OF AN INJURY AWARENESS AND PREVENTION PROGRAM

INTRODUCTION
The P.A.R.T.Y. (Prevent Alcohol and Risk Related Trauma in Youth) Program was developed in 1986 for the community served by the Regional Trauma Centre at Sunnybrook and Women's College Health Sciences Centre in Toronto, Canada. The program consists of a one-day, in-hospital, injury awareness and prevention program for 35-35 students, age 16 years and over. The purpose of P.A.R.T.Y. is to provide useful, relevant information to young people about injury (trauma) that will enable participants to recognize potential injury producing situations, make informed prevention oriented choices and adopt behaviors and actions that minimize risk.

IN THEIR OWN WORDS
It was all the emotions you could ever feel rolled up into one. A life saving experience that everyone needs. I never thought that could happen to a human body. It was a very influential experience mainly because we were talking face to face with people that were once not like us. Real, not like stuff on T.V. This was the greatest experience for me because no other lecture or activity has ever hit me as hard as this program did. The realization that you are not invincible.

RESULTS:
ONTARIO MINISTRY OF HEALTH DATA

Control Group = 125,207

- # of admissions = 2721 (2.2%)
- # of deaths = 18

Study Group = 3,295

- # of admissions = 31 (0.9%)
- # of deaths = 0

KEY MECHANISMS OF INJURY

INDEPENDENCE

The critical, dynamic relationships between choice, independence and injury is explored. Led by a multidisciplinary team of health care professionals the program introduces the students to patients with severe injuries and highlights mechanisms of injury prevention. The program begins at Sunnybrook & Women's and continues at a spinal cord rehabilitation hospital.

RESULTS:
ONTARIO MINISTRY OF TRANSPORTATION DATA

Control Group

- # of offences = 1360 (1.6%)
- Alcohol = 7 (0.3%)
- 85% of offences = speeding 10-20 over limit

Study Group

- # of offences = 2106 (1.9%)
- Alcohol = 63 (5.5%)
- 65% of offences = speeding 10-20 over limit

IN THEIR OWN WORDS

A P.A.R.T.Y. DAY IN PICTURES

VISIT US AT www.partyprogram.com
Results from a ten-year analysis of a PARTY Program in Canada
(Banfield et al, 2004)

- 10% - less likely to have a **speeding** offence
- 75% - less likely to have an **alcohol** offence
- 50% - less likely to have a **seatbelt** offence
- 10% - less likely to have a subsequent **collision**

(compared to control group)
P.A.R.T.Y. Program
(Prevent Alcohol and Risk Related Trauma in Youth)

Background/Introduction
The ‘Prevent Alcohol Risk-related Trauma in Youth’ (P.A.R.T.Y.) Program has been operational at Royal Perth Hospital since 2006. The aim of the Program is to promote injury prevention through reality education, enabling youth to explore the dynamic relationship between choice, independence and injury. A ten year analysis of a Program, operating in Canada found a 75% reduction in alcohol related offences, 50% reduction in seat bel offences and a 10% reduction in speeding offences within the student group that were exposed to the Program. (Banfield, 2004).

Aim
The P.A.R.T.Y. Program aims to empower youths to make choices to minimise risk-taking behaviour and to increase knowledge of the impact of injury on quality of life.

Method
Upon arrival at Royal Perth Hospital, data on baseline risk-taking behaviour/attitudes is gathered from attendants via a questionnaire. Amongst the questions, they are asked to identify the likelihood of sustaining an injury due to risk taking activities and whether their behaviour will change as a result of attending the Program. On completion of the Program the same questionnaire is used to ascertain any change. Attendees are also asked what they learnt from the Program.

The Program is delivered weekly with a maximum of 30 youth per group. Participation is offered to all schools within the Perth Metropolitan area. Our target population is youth between the ages of 14 and 24. Sessions outside the school term are offered to the Juvenile Justice Service and external organisations that employ apprentices.

Discussion
Data collected during the program is used to significantly reduce the number of students involved.

The Department of Health Strategic Intent 2005-2010, Department of Health, Government of Western Australia, Australia


Conclusion
This Program is a vital component in the growing community effort to reduce death and injury in alcohol and risk related incidents. Health Promotion and Prevention is arguably the most effective way to improve the health of our community.
2,810 High School Students

Male (n=1206) - 43%
Female (n=1604) - 57%
Would you drive whilst over the legal alcohol limit?

- Pre-PARTY: Yes: 4, Maybe: 35, Never: 61
- Post-PARTY: Yes: 2, Maybe: 18, Never: 80
- 3-5 months: Yes: 4, Maybe: 26, Never: 70
Do you think PARTY will make a difference to the way you think about your actions in the future?
Students’ responses [sic]

“In short I have learnt don’t drink and drive, wear a seat belt, don’t drive like an idiot, don’t take peer pressure, and behave and be careful on the roads because your not putting just urself at risk but everyone else on the roads too.”
“I personally do not want to end up in a wheelchair for the rest of my life unable to do many or everything for myself, or see any of my friends like that and I will do all I can to set a god example by not crossing that stupid line.”
“We were shown the methods of going to the toilet when paraletic...

...having a greater respect for people who are paraletic and the process which they have to go through, the recovery alone being an epic battle.”
And finally...

“After what I saw that day I’m not sure yet what impact it will have on me. I hope to make better decisions in the future.”
Long term evaluation

- Juvenile Justice retrospective cohort study 2006-2009 (censor date 30 June 2010) Repeat traffic-related offences (Police Department)
- Juvenile Justice 2006-2010 (censor date 31 Dec 2013) Hospital admissions (WA Data Linkage Unit)
- Student 5-year prospective follow-up (NHMRC pending) Hospital admissions (WA Data Linkage Unit)
So what is the best approach to this problem?

“Popular Approaches Are Ineffective, effective Approaches Are Politically Impossible”

By Robin Room, Centre for Social Research on Alcohol and Drugs, Stockholm University, 2000.
Systems approach

- Parental Intervention
- Risk perception training
  - Simulated driving programmes
- Social marketing campaigns
  - “Friends Don’t Let Friends Drive Drunk”
- School training programs
- Graduated Driver Licensing Systems (GDLS)
- Vehicle restrictions
- Alcohol interlocks
- Modifying the road environment
- Improved public transport
- Legislation:
  - Stricter penalties or demerit point systems
References & Bibliography


References & Bibliography cont’d


Senserrick T, Hawarth N. (No date). Young driver research: Where are we now? What do we still need to know? Monash University Accident Research Centre.

Other injury prevention initiatives
Thankyou!
(How many glasses of wine did you have with lunch?)

Call a cab before it's home to go time.