Smokefree sign observation and other real world research

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Aims

To:

• Study smokefree signage and other tobacco-related items in a range of settings

• To explore ways to extend tobacco control research further into real-world situations
Background

- Outdoor smokefree areas are expanding internationally, but little is known about the signage used in such areas
- Tobacco control research is largely ‘at arms length’
- Medline search results for ‘tobacco’ and:
  - Surveys: 15593
  - Experiments: 2553
  - Interviews: 2392
  - Documents: 674
  - Focus groups: 449
  - Natural experiment: 18
  - Photos: 13
  - Field observations: 5
Methods: Signage studies

5 field observation studies during 2014 – 2016 (some combined with use of Google Street View [GSV])

- **50 schools** in 24 lower North Island (LNI) cities/towns/rural districts: Field and GSV
- **10 LNI public hospitals** by observation & GSV, 20 random NZ hospitals *only* by GSV
- **20 sports stadia and racecourses**: Field and GSV
- **54 children’s playgrounds** in 17 LNI local authorities
- **All outdoor smokefree signage** in Karori and East Porirua
Results: 50 schools

• 32% (16/50) had smokefree signs at the main entrance

• Observations using GSV had only modest sensitivity (eg, 44% for main entrance signs)
Hospitals

Field observation and GSV at 10 LNI hospitals

• 9/10 of hospitals had smokefree signs at main entrance
• 40% of hospitals had any signs that stated that the ‘grounds’ were smokefree
• Good GSV sensitivity (100%) for main entrance signs

GSV use for random 20 NZ hospitals

• 50% had a smokefree sign at the main entrance
54 playgrounds

• 22% had *any* smokefree signage on an entrance path to the playground

• Qualitatively, the smokefree signage was generally poorer than for signage banning dogs, based on:
  – smaller sign size,
  – less use of clear symbols
  – being far wordier
10 sports stadia and 10 racecourses

- 60% of the sports stadiums had smokefree signage at their main entrances
- None of the racecourses did (0/10)
- The utility of GSV was modest
  - sensitivity: 33% for main entrance and 67% for any smokefree signage
All potential smokefree signs in two suburbs

95 potential settings where smokefree signage might occur were surveyed

- In Karori N=50, in East Porirua (EP) N=45

For play areas, where city smokefree policies applied:

- Kaori had higher ‘any signage per setting’ (83% vs 17% for EP, p=0.018)
Methods: Extending tobacco control research

• **Observations** outside 14 cafes-bars in 2013, and 55 in 2014, for smoking and tobacco packs

• **Observations** of smoking related signs, activity, ashtrays etc, were compared to GSV for 400m sections of 12 Wellington streets

• **Automated wearable cameras** (KidsCam/Marcus Gurtner)
  – Photos every 10 seconds
  – Worn by 34 students (from households with smokers)
  – Photos from 3 days vetted to find those taken in ‘private’ areas: homes, private gardens or private vehicles
Results: Street observations

For every 5 street sections surveyed:
• 1 smoking-related health promotion item (eg, below)
• 12 regulatory items (eg, smokefree sign)
Results: Kidscam photos

- 99 photos with tobacco related items/activities were seen in 140,818 ‘private area’ photos

- Most of these photos (63%) were of tobacco-related paraphernalia only (tobacco pouches, loose tobacco, cigarette packets, cigarettes, rolling papers, filter tips, and cigarette butts)
Discussion: Signage

• Field observation is better than GSV except for large signs; GSV is low cost

• Signage for all types of settings could be better:
  – In coverage (schools, playgrounds, playing fields, stadia, racecourses)
  – In content (eg, specifying hospital grounds)
  – In design: size, clarity, use of symbols

• There are big opportunities for health promoters, officials and policymakers to improve smokefree policy implementation
Discussion: Extending tobacco control research

- Widening the array of data sources helps meet the increasing call for multi-method evaluations

- Systematic photos can provide detailed contextual information relating to:
  - ritualistic aspects of smoking and accompanying behaviours
  - the use of complementary products/dependencies (e.g. alcohol)
  - the types of public and ‘private’ areas in which smoking-related activities occur
  - the frequency and duration of smoking in such places
References


