Evaluating the impact of mass media campaigns

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Outline

– Understand why evaluation is important in Social Marketing

– The particular problems of evaluating complex interventions.

– The value and appropriateness of different evaluation methods.

– A look at an anti-smoking tobacco example from England

– Looking at the tobacco industry – using research to deconstruct their methods

– New challenges and opportunities – social media, customer relationship marketing, neuroscience.
Evidence and effectiveness: the debate

• “Anecdotal evidence suggests that cost pressures, coupled with the inability to present conclusive evidence of effectiveness, are conspiring to make health promotion contracts a soft option for budget cuts....

To get out of this downward spiral, health promotion workers must demonstrate evidence of its effectiveness by establishing a robust evidence base...”

Hierarchy of experimental research evidence

1. Systematic reviews and meta analysis
2. Well designed randomised controlled trials (RCT)
3. Well designed controlled trials without randomisation
4. Before and After studies
5. Small case studies
6. Opinions of respected authorities
• “The Randomised Controlled Trial (RCT) is problematic and typically inappropriate for evaluating health promotion programmes....”

  – Tones K. in ‘Evaluating Health Promotion’
<table>
<thead>
<tr>
<th>Clinical Trials</th>
<th>Heath Promotion Trials</th>
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<tr>
<td>Testing a relatively quick cure for specific illness.</td>
<td>Prevent ill health in the future (sometimes 40 years in the future).</td>
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<td>Larger effects achieved quickly</td>
<td>Smaller effects achieved over a longer period</td>
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<td>Easier to gain agreement from health professionals and individuals to conduct trial</td>
<td>Approval for trial can be more difficult to secure</td>
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<td>Participants are usually seeking a cure /remedy</td>
<td>Participants currently well and may not perceive themselves as needing help - recruitment more difficult</td>
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<td>External validity i.e. how generalizable the findings are to the wider population. In clinical trials results are valid only for the groups tested. When applied outside test group can cause problems e.g. SEROXAT</td>
<td>Participants more likely to be younger, higher social class and more likely to believe in and adopt a healthier lifestyle than non participants - External validity can be compromised.. Also testing under unusual conditions may not be reproducible in the real world</td>
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Clinical Trials

- Clinical trials usually have a simpler biological basis (drugs, surgery, physio) and are easier to control

- Unit of randomisation – individual

- Internal validity (a measure of the extent to which the findings are real and not the result of bias). With RCTs this is not a problem. Control group placebo possible. Double blind possible

- Exposure of control group to intervention more easily controlled

Heath Promotion Trials

- Health promotion generally multi-faceted, complex interventions which **diffuse** into the population to achieve behavioural change at the individual or societal level. There is a lot of extraneous “**noise**” to control

- Unit of randomisation, individual, community or nation. Individual randomisation can be difficult

- Difficult to devise a placebo for a community development intervention. Impossible to blind people to the fact they have received a HP intervention

- High risk that the control group (e.g. neighbouring community) is exposed to intervention
Conflict between mass public health interventions and experimental research

Mass media “diffuses” awareness, information, knowledge, attitudes into the population, reinforcing or creating new social norms;

- it’s a significant part of what mass media public health campaigns are trying to do.

If successful this will create a lot of “noise” or “buzz” around the issue.

Experimental designs are meant to control as much of this noise as possible, or at least contain it within particular population groups or regions.
• RCTs have a place in the evaluation of Health Promotion, where possible to ‘randomise’ and to ‘control’

• But in many instances, where dealing with complex social systems, RCTs are of very limited value, and therefore other approaches to evidence are necessary.
The evidence iceberg

Evidence derived from published research & evaluation

Evidence derived from learning from effective practice

Evidence & learning held in the experience of practitioners & planners who are actively involved in on-going implementation & development of work & related practice in their relevant areas

Can lead to unnecessary duplication of effort:

e.g.: 140 research studies into 8-19 year olds 2002/4 (undertaken by 15 Govt Depts, through the COI) most of these not published
What do the Government use as evidence?

Governments have a broader conception of evidence than academics.

A wide range of methods for gathering & appraising evidence for government is required.

- Influences on government other than evidence including:
  - experience,
  - expertise
  - judgement of policy officials and Ministers
  - values and ideology
  - available resources
  - habits and tradition
  - lobbyists, and pressure groups
  - media
  - the pragmatics and contingencies of everyday political life.

“Is Evidence based Government possible” – P. Davies, Cabinet Office 2004
Evaluating Social Marketing.
The research projects that will help

**Process evaluation**
- Analysis of unpaid Media coverage
- Stakeholder views
- Helpline data
- Media Buying Audit

**Qualitative research**
with the Target audiences, the Key “Segments”

**Quantitative evaluation**
of progress towards objectives.
Surveys of Awareness, Knowledge, Attitudes, Beliefs, Intentions BEHAVIOUR

**OTHER DATA SOURCES**
(stuff that is already there and collected by someone else)
- Clinical data e.g. HIV prevalence data, Immunisation uptake
- Sales data
- Market research data
- Other Government/national surveys

*Mass Media /Social marketing Intervention*
Indicators

- Epidemiological indicators?
  - Mortality and morbidity time lag between input and output too long – (decades)
- Behaviour – reducing risk factors e.g.
  - Smoking behaviour
  - Immunisation uptake
  - Condom use with casual partners
- Intermediate indicators (believed to be precursors to behaviour change)
  - Awareness (of your initiative and the competition)
  - Knowledge
  - Beliefs
  - Attitudes
  - Skills acquisitions/empowerment
- Other Indirect indicators (may be viewed as process or outcome indicators)
  - Quality of materials used
  - Affect on policy decisions / the law
  - Affect on opinion formers and health workers
  - Analysis of media coverage of the programme
  - Change in the social climate – e.g. a campaign to reduce stigma against people with HIV
  - Sales data - Condom sales, cigarette sales, healthy food sales
  - Service use
Quantitative evaluation

Surveys of the target group/wider population

- **KABP’s** (Knowledge, Attitudes, Beliefs and Practice) – and other lifestyle indicators – if possible replicate existing measures

- **Regular Monitoring** (every month? 6 months? 2 years?) OR larger less frequent studies

- **Quality rather than quantity of data points** (could use existing surveys – depending on the scale of the intervention)

- Representative samples vs random samples
If an evaluator concentrates on outcome only:

“it’s rather like a critic who reviews a production on the basis of the script and the applause meter readings, having missed the performance”

Hamilton and Parlett “Beyond the numbers game”
Process evaluation

• Process evaluation provides a description of all aspects of the implementation of a health promotion intervention.

• Understanding of how and why an intervention has achieved or failed to achieve its objectives is the central concern of process evaluation.

• Qualitative methods (focus groups, in depth interviews) and Quantitative methods (surveys, collecting cost data and sales, media analysis)
Key Components of process evaluation

• **Context**
  – The wider social, cultural, political and economic environment in which the intervention is embedded

• **Reach**
  – Awareness and uptake of the intervention outputs by the target population

• **Dose delivered**
  – the amount of intervention provided by the intervention team

• **Dose received**
  – the extent of engagement with the intervention shown by the target population

• **Fidelity**
  – the extent to which the intervention was delivered as planned
Process evaluation

- **Media Analysis**
  - Media coverage, column inches, quality of coverage, campaign mentions

- **Helpline analysis**
  - Number and quality of calls

- **Stakeholder Analysis**
  - The views of people delivering work on the ground
    - health workers, local services
Process evaluation

• **Service Data**
  – Who is using the service, what they think of it, would they recommend it to others
  – Did you over-stimulate demand?
Key campaign message:

"Anyone can get it, gay or straight, male or female. Already 30,000 people are infected."
Qualitative work with the target group (focus groups, in depth interviews)

- Always worth talking to the target group after they have been exposed to the intervention for a short while.
  - Acts as a check that you got it right after the earlier pretesting stage
  - Spot problems early on – so you can make important modifications and fine tune
  - Is the “exchange” working?
  - Can keep programme makers and policy people involved – let them view a few focus groups - connect them with the target audience
The expected effects for media campaigns

- Seatbelt campaigns 15%
- Dental care 13%
- Adult alcohol reduction. 11%
- Family planning 6%
- Youth smoking prevention 6%
- Heart disease reduction (which include nutrition and physical activity) 5%
- Sexual risk taking 4%
- Mammography screening 4%
- Adult smoking prevention 4%
- Youth alcohol prevention and cessation 4-7%
- Tobacco prevention 4%
- Youth drug and marijuana campaigns had the least effect 1-2%

- AVERAGE = 5%

Source: A recent (2008) narrative review of reviews by Snyder et al which included US, European and developing world interventions used meta analytic methods to estimate the average effect sizes for media campaigns. The effects reported were the changes in behaviour from pre intervention to post intervention for specific behaviours:
An Example
Evaluating an integrated mass media social marketing campaign

• Mass media anti-smoking campaign

  • Target: Motivated smokers wanting to quit – Adults C2DE, emphasis on parents

  • Provide supporting advice for smokers’ efforts to quit and stay quit (telephone helpline support)

  • Display an understanding of the difficulties of stopping

  • Build smokers’ confidence in their ability to quit

• Style and tone of campaign = morbid, bizarre humour

ANTI-SMOKING NOT ANTI-SMOKER
TV ads and Radio

“withdrawal symptoms”
“Let me show you how much ash a 20 a day smoker makes of course, not all are cremated”
TEST (TV,Radio)
- Tyne Tees (3m)
- Yorkshire (5.7m)
- Granada (6.5m)

CONTROL
- Central Region (9m)

Additional Local anti-smoking network funded in West Yorkshire
Research Plan

PROCESS EVALUATION OF LOCAL NETWORK

LOCAL ACTIVITY NETWORK IN WEST YORKSHIRE

QUAL Qual Qual Qual

WAVE 1 TV CAMPAIGN WAVE 2 TV CAMPAIGN WAVE 3 TV CAMPAIGN

Media Monitoring Media Monitoring

Quitline Eval Quitline Eval

YEAR 1 YEAR 2
Advertising and sponsorship spend "The competition"

Advertising and Sponsorship Spend
Dec 1992 - Dec 1994

- Tobacco Industry £200m
- The Campaign £2m
- NRT (Nicotine Replacement Therapy) £12.4m
Analysis

• Sample – more than 5000 people across 4 regions interviewed over time.

• Looked at smoking cessation and relapse across all regions

• Controlling for the effects of many other variables (e.g. age, sex, certain attitudes - whether they wished to stop etc) the campaign reduced prevalence of smoking by 1.2%
The Results

• 1.2% is a small change

• But 1.2% equates to a large population in the test regions.

More cost effective than NRT
(Nicotine Replacement Therapy)
The Evaluation

• It was expensive
• It was time consuming
• It was high risk

• Worth the investment?

• Research doesn’t have to be expensive to make an impact?

• Small focused studies, with clear objectives, properly executed, can lead to substantial changes
Critical social marketing

• Don’t monitor only your own stuff

• Getting insight into peoples lives can reveal what “the competition” (the tobacco industry) is doing and help you stop it.
The “Reg” campaign for Embassy Cigarettes

- Nationwide poster campaign by the tobacco industry from the early 1990’s
The “Reg” campaign for Embassy Cigarettes

*Reg on Race Relations*
“My Uncle Nobby used to own a bookies”

*Reg on the Stock Exchange*
“I’d never swap my cubes for gravy granules”

Humorous and “quirky”.
But are they really aimed at adults?
• Whilst testing some of our own anti-smoking ads aimed at teenagers we noticed that many teenagers in focus groups were mentioning this campaign – they clearly liked it.

• According to the tobacco companies this campaign was “aimed at adults”

  *We (the HEA) and ISM thought they were lying…*

• We commissioned research to look at the appeal that this so called “adult” campaign had for teenagers.
Results

- **Mixture** of quantitative (surveys) and qualitative (focus groups) were used.

- We looked at different aged groups within 11-16 year population and also interviewed adults about the campaign.

- Children were familiar with a lot of different types of cigarette advertising but **particularly liked the “Reg” campaign**.

- The campaign held most appeal for older teenagers **14-15 years olds**. They enjoyed the humour and its **mockery of serious issues** – they identified with it and this identification transferred to the brand – they favoured Regal cigarettes.

- **Regal was one of the most popular** brands amongst this groups, it was seen as young, ordinary and streetwise. The “Reg” campaign even appealed to young non-smokers.

- In contrast the campaign’s supposed target group of **33-55 years olds did not identify with the campaign** and were unappreciative of it. They found the school boy humour childish and many thought that if it was aimed at 35-55 year olds, it was insulating and derogatory, portraying their age group as stupid and ignorant.
Results

- The voluntary code at the time stated that “Advertising must not appeal to children more than it does to adults.”
- We had the evidence.
- “Reg” broke the voluntary code and The Advertising Standards Authority (ASA) banned it.
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- The voluntary code at the time stated that
  “Advertising must not appeal to children more than it does to adults”
- We had the evidence.
- “Reg” broke the voluntary code and The Advertising Standards Authority (ASA) banned it.
• Relatively inexpensive piece of research using qualitative and quantitative data to test a hypothesis.

• It made an impact - reduced children's exposure to a large national campaign and lost Embassy (Imperial Tobacco plc) a lot of money.

Summary Points

• Programmes should have clear and measurable objectives.

• Some objectives are simply not achievable – be realistic about what can be achieved. What effect size is realistic.

• Interventions should be based on a model of change or be conceptualised with a clearly articulated process of change.

• Before you start the study think about what sort of analysis you will be doing.

• Understand your target group and audience before you commit to anything.
  – Don’t lose sight of the target group. If you are targeting “hard to reach” groups make sure the research concentrates on them and recruits them into your samples. Make sure you are not widening the gap in health inequalities.

  – Where possible involve the target group early on in the process.

  – Expensive evaluations on poorly designed initiatives -there is no point.
Summary Points

- Methodological **pluralism** – essential
  - Make use of a wide range of data on lifestyles, attitudes, aspirations
  - Where possible use established questions from Government surveys so you can compare national and local outcomes
  - Familiarise yourself with new research methods – Online surveys are getting more reliable and they are cheap – but use them cautiously.
  - Social media is a space for intervention but also an opportunity for research and evaluation
- Develop a **“rich”** description of what has gone on and check for negative side effects.
- **Triangulate** with other data to check and strengthen your findings.
- Scan the environment to check for unforeseen events and what the competition is doing
- Get in place adequate research **governance** for your evaluation.
- Keep the programme makers involved and stimulated by the research.
- Publish and disseminate findings – if the programme works **or** if it doesn’t.
New Challenges and Opportunities
Insight

Insight and research into peoples’ behaviour is becoming more sophisticated.

Do we as public health practitioners make enough use of insight and research into our target audience?

The “competition” exploit insight as a strategic asset for their business.

For example the competition to a healthy eating campaign are those that market unhealthy food.
The “Stacker Quad” Burger
A Burger King Product

4 burgers + 4 slices of cheese + 4 slices of bacon – NO SALAD = 70% of your daily calorie intake
The “Stacker Quad” Burger
A Burger King Product

“We’re satisfying the serious meat lovers by leaving off the produce (salad) and letting them decide exactly how much they can handle”

Denny Marie Post
Chief Concept Officer
Burger King

“We listened to consumers who said they wanted to eat fresh fruit – but apparently they lied.”

Wendy’s Spokesperson

“Anti fast-food backlash”

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Research and Insight – plenty of it!
• Industry monitoring
• Social climate monitoring
• Consumer research
• Family Shopping behaviour
How much do we (UK) spend on research?

• Across government and public services, spend on research 2008/9
  • £100 -150 million

• The commercial market research industry
  • £1.8 billion in 2008/9
Neuroscience in Brand Research

How you describe what you feel about an advertisement in an interview or focus group is only part of the story

– the brain tells us more.
Neuroscience in Brand Research

How you describe what you feel about an advertisement in an interview or focus group is only part of the story.

– the brain tells us more.

ECG
Electroencephalography

fMRI
Functional magnetic resonance imaging
New Media Landscapes

• Social Media
  – Blogging
  – Micro blogging e.g. Twitter
  – Social networks e.g. Facebook
  – Video Sharing e.g. YouTube
  – Webinars
Faced with greater and greater restrictions on their marketing avenues, tobacco companies are turning to social media sites to peddle their wares.
A Public Health Response

Social Media

Extract from “Social Media for Tobacco Control” by Cameron D. Norman
UK Anti-smoking Intervention

Quit Apps

Quit App
Take practical support, encouragement and advice with you wherever you go. The Quit Smoking App is always in your pocket, helping you through each stage of the quit process.

Quit smoking support on your mobile phone
If you have an iPhone or iPod Touch you can download the free NHS Quit Smoking app from the iTunes app store.

The NHS Quit Smoking app makes it easier to stop.
- Provides daily support and instant tips
- Keeps track of how much money you’re saving
- Shows how many days you’ve been smokefree
- Includes a direct line to the NHS Stop Smoking helpline
- Provides links to local NHS Stop Smoking Services

Download it now!

For those that do not have an iPhone or iPod touch, freetext the word CALCULATOR to 64746 and receive a link to a smoking calculator on the mobile web.
“Primary target audience: We want to appeal to early adopting ‘Young & Energised’ consumers who engage in new technologies and gadgets, always looking for the new things to tell their mates about and share on their Facebook/Twitter. These aren’t the ‘techies’ of the world, they are your mates who are telling you about the new stuff first, sending cool links via YouTube etc…”

Internal Smirnoff research document

Extract from

“They’ll Drink Bucket Loads of the Stuff”
An Analysis of Internal Alcohol Industry Advertising Documents
by Professor Gerard Hastings
Internal documents for the Smirnoff brand outline the way in which ‘viral’ strategies are intended to operate in practice through the process of ‘seeding’:

“Seeding the Viral…The purpose of seeding is to place the creative [the TV advert] within sites, message boards and communities frequented by the heaviest online users…seeding provides a very credible relationship with a potentially enormous audience through a 1-2-1 relationship to achieve 1-2-many…Viral sites, creative communities and lads’ websites will be targeted.”

Extract from

“They’ll Drink Bucket Loads of the Stuff"
An Analysis of Internal Alcohol Industry Advertising Documents
by Professor Gerard Hastings
They are building more sophisticated relationships with their customers

We need to do the same

.....and evaluate the impact.

THANK YOU