

Effectiveness of social marketing campaigns in the prevention of occupational injury, disease and disability

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Institute for Work & Health

Who we are and what we do

- independent, non-profit research institution
- multi-partite Board of Directors: Labour, employer, research, Workplace Safety & Insurance Board
- established in 1990
- research on the effectiveness of prevention, treatment and return-towork in work-related disorders
- commitment to knowledge transfer and exchange



Overview

Three approaches to protection of the health of workers

Regulation: rules prescribing specific policies and practices to be followed by enterprises

Insurance: Economic incentives that reward or penalize enterprises on the basis of health outcomes

Information and consultation: enterprises may adopt practices if provided evidence of effectiveness

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Overview

Social marketing is the application of commercial marketing technologies to the analysis, planning, execution and evaluation of programs designed to influence voluntary behavior of target audiences in order to improve their personal welfare and that of society.

Consumer marketing aims to influence individual's preferences and product purchasing decisions.

Social marketing aims to influence behaviors such as drug use, smoking or reproductive behaviors. Social marketing will use mass media communication as one instrument to promote changes in socially important behaviors.



Overview

Expenditures on occupational health social marketing campaigns in Ontario are in the range of \$1 per worker.

Expenditures on inspection and enforcement are in the range of \$15 per worker.

Expenditures on consultation and education services are in the range of \$15 per worker.

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Social Marketing Campaigns

2 Case Studies

On the Right Foot Prevention of injuries caused by slips, trips or falls 30,000,000 private sector workers HVBG, Germany 2003-2005

Back pain: don't take it lying down Prevention of back pain disability 4,300,000 workers Victoria, Australia 1998-1999



On the Right Foot HVBG, Germany

The campaign, delivered from 2003 to 2005, had the objective of reducing the incidence of workplace accidents arising from slips, trips, and falls by 15% over two years.

Campaign used television and print advertising, posters and pamphlets as well as consultation and inspection activities to target the 30,000,000 all workers insured by the Statutory Accident Insurance & Prevention Association in Germany.

BG Institute for Occupational Safety and Health (BGAG). Evaluation of the On the Right Foot Campaign (translated by the Institute for Work and Health). Dresden, Germany: BG Institute for Occupational Safety and Health (BGAG); 2005 Jun 23.

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Social Marketing Campaigns

On the Right Foot HVBG, Germany

Expenditures on television and print advertising, posters and pamphlets was approximately €1,360,000 over two years.

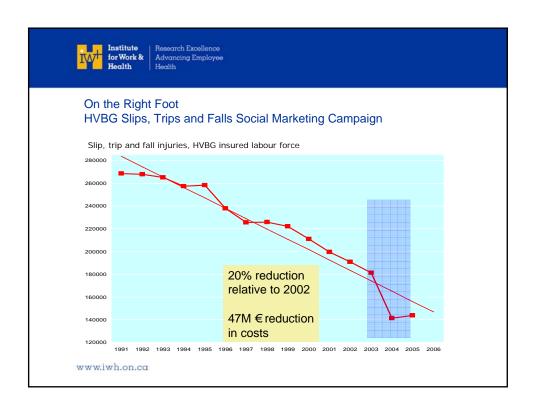
In addition, workplace consultation services were provided accident safety experts in each of 14 economic sectors. These services may represent approximately 140 person years over the two year campaign $(\in 9,240,000)$.



On the Right Foot HVBG, Germany

The evaluation involved mixed methods: a pre-test, post-test, with comparison group design was used to assess the impact of the campaign on workplace conditions (two post-test assessments), while a time series with no comparison group was used to evaluate change in injury rates over time.

Improved workplace conditions and decreased injury rates were observed over time. The Statutory Accident Insurance & Prevention Association in Germany sponsored the campaign.





On the Right Foot Incidence of Accidents and Disability Pensions 2001-2005. Germany

	2001	2002	2003	2004	2005
	2001	2002	2003	2004	2005
Number of Accidents	199,500	190,900	181,400	144,000	143,700
Percent reduction relative to 2002				20%	20%
New Disability Pensions	4,730	4,760	4,761	3,561	3,602
Percent reduction relative to 2002				25.2%	24.3%
Compensation Costs	250,000	240,500	231,200	184,000	NA
Percent reduction relative to 2002				20.3%	

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On the Right Foot

Benefit / Cost Ratio	4.5
Campaign Cost	€10.6M
Reduction in compensation costs (1)	€47.0M

(1) 20% reduction in number of accidents attributed to slips, trips and falls, from 181,000 in 2003 to 144,000 in 2004 25% reduction in new disability pensions attributed to slips, trips and falls, from 4,760 in 2003 to 3,561 in 2004



Back pain: don't take it lying down

Evaluation of a population-based media campaign designed to reduce disability associated with back pain

Buchbinder R, Jolley D, Wyatt M. Population based intervention to change back pain beliefs and disability: three part evaluation. BMJ 2001: 322: 1516-20.

Buchbinder R, Jolley D. Population based intervention to change back pain beliefs: three year follow up population survey. BMJ. 2004 Feb 7;328(7435):321

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Social Marketing Campaigns

Back pain disability is a public health issue

- · back pain affects a substantial proportion of community
- lifetime prevalence back pain 60 to 80%
- 1-year prevalence back pain 50%
- point prevalence of back pain 15% to 30%
- second most common symptom prompting GP visits
- most common cause of activity limitation < 45 year-olds
- · often persistent and typically recurrent



Back pain disability is a public health issue

- involves use of substantial common resources
- leading musculoskeletal cause of health system expenditure in Australia

In Victoria:

- 4.3 million people
- back injury cost WorkCover \$510 million in 1999/2000
- 25% of all claims, 40% of all long term claims nearly 50% of the cost of all claims

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Back pain: don't take it lying down

Media campaign

Television, radio commercials

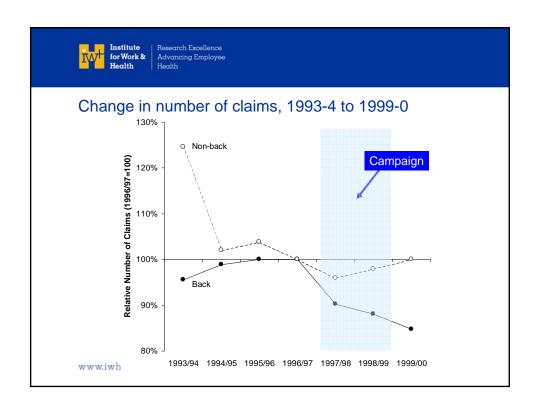
- · health care professionals
- local celebrities
- actors

Billboards, Posters

The Back Book

• 16 languages, insurers, GPs

Management guidelines of compensable back pain to doctors



•	Back pain: don't take it lying down Estimated reduction in claim incidence						
	Media Campaign Costs	Number of Back Claims	Reduction in Back Claims (1)	Reduction in Compensation costs (2			
Year 1	\$5.8M	8,115	876	\$10.N			
Year 2	\$2.3M	7,917	1,074	\$12.91			
Year 3	\$2.0M	7,618	1,387	\$16.6N			
Total	\$10.1M		3,337	\$40.0N			



Back pain: don't take it lying down Benefit and Cost Summary

Reduction in claim incidence (1)	\$40.0M
Reduction in medical care costs (2)	\$5.9M
Reduction in time off work (3)	\$20.0M
Total	\$65.9M
Campaign Cost	\$10.1M
Benefit / Cost Ratio	6.5

- Reduction in claims relative to incidence of 8,991 claims in 1996-97, assuming average claim cost of \$12,000
- (2) Assuming 20% reduction in medical care costs
- (3) Assuming 10% reduction in disability days

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A Review of Evaluations of Social Marketing Campaigns in Occupational Injury, Disease or Disability Prevention

February 27, 2007

Dr Cameron Mustard, ScD Ms Amber Bielecky, MSc

The study was supported, in part, by funding from WorkSafeBC (RS2005-SC12)



Main research findings

At present, typical levels of provincial expenditures on occupational health social marketing campaigns are in the range of \$100 per 100 workers.

A total of 30 of the 56 campaigns described in this review were judged to be reported to a high quality standard.

Of these 30 campaigns reported to a high quality standard, a majority reported measures of injury, disease or disability outcomes.

Of the 30 campaigns reported to a high quality standard, one targeted infection control, 14 targeted injury prevention, three targeted disease prevention, four targeted sun protection behaviors and seven targeted the prevention of disability following the onset of a work-related injury or disease.

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Main research findings

Social marketing interventions in occupational health and safety apply a wide range of strategies. A minority of campaigns reported to a high quality standard relied exclusively on public communications. The reported effects of these campaigns were weak.

A majority of campaigns reported to a high quality standard integrated public communications with educational programs, consulting services or targeted inspection and enforcement. The reported effects of these campaigns were stronger.

Only a small minority of social marketing campaigns reported information on campaign expenditures and provided estimates of the economic value of campaign outcomes. It is not possible, as a result, to estimate the cost-effectiveness of social marketing campaigns targeting occupational health.



Prevention policy implications

Social marketing approaches have demonstrated effectiveness in many domains of public health.

There is emerging evidence that these methods can be effective in improving and protecting the health of workers.

The quality of information available on the effectiveness and costeffectiveness of social marketing is very weak.

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Prevention policy implications

These weaknesses can be addressed if investments in social marketing campaigns incorporate resources to support high quality evaluations.

High quality evaluations need to address the following requirements:

- give substantial attention to internal validity
- measure intermediate outcomes and final outcomes
- respect the importance of replicating campaign evaluations conducted in other settings
- assemble comprehensive documentation of social marketing campaign activities
- examine the role of content and communication provided through the internet



Concluding Remarks

In developed countries, OHS prevention expenditures range from 2.5-7.0% of work disability insurance revenues.

Emerging evidence of the effectiveness of:

- a) regulation, inspection and enforcement,
- b) insurance incentives and
- c) information and consultation

Well-designed social marketing campaigns, combined with education and consultation services, can be effective in primary and secondary prevention.



