# Literature Search results: Behaviour Change

### Research question or topic:

Evidence of effective of education and training approaches and interventions, and behaviour change interventions

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### **Contents**

Comments from Knowledge Management/ searcher	2
Results	3
Systematic Reviews, Meta-analyses and Literature Reviews	3
Other studies	6
Behaviour change programmes and implementation	6
Secondary prevention	13
Apps and Games	14
Stop Smoking Services	17
Physical Activity	19
Pregnancy & Postnatal	25
CASH Services	27
Diabetes	28
Children and families	30
Health Checks	35
Specific populations - BME	36
Obesity/ weight management	36
'Five a day'	39
Alcohol	40
Organisational/ occupational heath	41
Appendix	44
Sources and Databases Searched	44
Search Strategy	44
Help accessing articles or papers	15

### Comments from Knowledge Management/ searcher

As this is a large topic area, we have limited the results to the last 5 years and UK based interventions and studies, and those focusing on behaviour change programmes . However as this still gives a wide variety of literature, we have broken the results down by broad topic (see contents list) . There were 3 papers which were either systematic reviews or literature reviews, giving an overview of a range of evidence, so you may wish to start with these papers (see page 3) . Only one study (*Using health psychology to help patients: promoting healthy choices*, p7) specifically referred to the behaviour change intervention as being linked to Making Every Contact Count. (Please see separate results for the MECC evaluations).

### Results

## Systematic Reviews, Meta-analyses and Literature Reviews

Systematic reviews of and integrated report on the quantitative, qualitative and economic evidence base for the management of obesity in men.

Author(s): Robertson, Clare; Archibald, Daryll; Avenell, Alison; Douglas, Flora; Hoddinott, Pat; van Teijlingen, Edwin; Boyers, Dwayne; Stewart, Fiona; Boachie, Charles; Fioratou, Evie; Wilkins, David; Street, Tim; Carroll, Paula; Fowler, Colin Source: Health technology assessment (Winchester, England); May 2014; vol. 18 (no. 35); p. v-cdxxxvii Publication Date: May 2014 Publication Type(s): Research Support, Non-u.s. Gov't Journal Article Review PubMedID: 24857516

Available at Health technology assessment (Winchester, England) - from Unpaywall

Abstract: BACKGROUND Obesity increases the risk of many serious illnesses such as coronary heart disease, type 2 diabetes and osteoarthritis. More men than women are overweight or obese in the UK but men are less likely to perceive their weight as a problem and less likely to engage with weight-loss services. OBJECTIVE The aim of this study was to systematically review evidence-based management strategies for treating obesity in men and investigate how to engage men in obesity services by integrating the quantitative, qualitative and health economic evidence base DATA SOURCES Electronic databases including MEDLINE, EMBASE, PsycINFO, the Cochrane Central Register of Controlled Trials, the Database of Abstracts of Reviews of Effects and the NHS Economic Evaluation Database were searched from inception to January 2012, with a limited update search in July 2012. Subjectspecific websites, reference lists and professional health-care and commercial organisations were also consulted. REVIEW METHODS Six systematic reviews were conducted to consider the clinical effectiveness, cost-effectiveness and qualitative evidence on interventions for treating obesity in men, and men in contrast to women, and the effectiveness of interventions to engage men in their weight reduction. Randomised controlled trials (RCTs) with follow-up data of at least 1 year, or any study design and length of follow-up for UK studies, were included. Qualitative and mixed-method studies linked to RCTs and non-randomised intervention studies, and UK-based, men-only qualitative studies not linked to interventions were included. One reviewer extracted data from the included studies and a second reviewer checked data for omissions or inaccuracies. Two reviewers carried out quality assessment. We undertook metaanalysis of quantitative data and a realist approach to integrating the qualitative and quantitative evidence synthesis. RESULTS From a total of 12,764 titles reviewed, 33 RCTs with 12 linked reports, 24 non-randomised reports, five economic evaluations with two linked reports, and 22 qualitative studies were included. Men were more likely than women to benefit if physical activity was part of a weight-loss programme. Reducing diets tended to produce more favourable weight loss than physical activity alone (mean weight change after 1 year from a reducing diet compared with an exercise programme -3.2 kg, 95% CI -4.8 kg to -1.6 kg). The type of reducing diet did not affect long-term weight loss. A reducing diet plus physical activity and behaviour change gave the most effective results. Low-fat reducing diets, some with meal replacements, combined with physical activity and behaviour change training gave the most effective long-term weight change in men [-5.2 kg (standard error 0.2 kg) after 4 years]. Such trials may prevent type 2 diabetes in men and improve erectile dysfunction. Although fewer men joined weight-loss programmes, once recruited they were less likely to drop out than women

(difference 11%, 95% CI 8% to 14%). The perception of having a health problem (e.g. being defined as obese by a health professional), the impact of weight loss on health problems and desire to improve personal appearance without looking too thin were motivators for weight loss amongst men. The key components differ from those found for women, with men preferring more factual information on how to lose weight and more emphasis on physical activity programmes. Interventions delivered in social settings were preferred to those delivered in health-care settings. Group-based programmes showed benefits by facilitating support for men with similar health problems, and some individual tailoring of advice assisted weight loss in some studies. Generally, men preferred interventions that were individualised, fact-based and flexible, which used business-like language and which included simple to understand information. Preferences for men-only versus mixed-sex weight-loss group programmes were divided. In terms of context, programmes which were cited in a sporting context where participants have a strong sense of affiliation showed low drop out rates and high satisfaction. Although some men preferred weight-loss programmes delivered in an NHS context, the evidence comparing NHS and commercial programmes for men was unclear. The effect of family and friends on participants in weight-loss programmes was inconsistent in the evidence reviewed - benefits were shown in some cases, but the social role of food in maintaining relationships may also act as a barrier to weight loss. Evidence on the economics of managing obesity in men was limited and heterogeneous. LIMITATIONS The main limitations were the limited quantity and quality of the evidence base and narrow outcome reporting, particularly for men from disadvantaged and minority groups. Few of the studies were undertaken in the UK. CONCLUSIONS Weight reduction for men is best achieved and maintained with the combination of a reducing diet, physical activity advice or a physical activity programme, and behaviour change techniques. Tailoring interventions and settings for men may enhance effectiveness, though further research is needed to better understand the influence of context and content. Future studies should include cost-effectiveness analyses in the UK setting. FUNDING This project was funded by the NIHR Health Technology Assessment programme.

Database: Medline

### The effectiveness of community engagement in public health interventions for disadvantaged groups: a meta-analysis.

**Author(s):** O'Mara-Eves, Alison; Brunton, Ginny; Oliver, Sandy; Kavanagh, Josephine; Jamal, Farah; Thomas, James **Source:** BMC public health; Feb 2015; vol. 15; p. 129 **Publication Date:** Feb 2015 **Publication Type(s):** Research Support, Non-u.s. Gov't Meta-analysis Journal Article Review **PubMedID:** 25885588

Available at BMC public health - from ProQuest (Hospital Premium Collection) - NHS Version Available at BMC public health - from Unpaywall

Abstract: BACKGROUND Inequalities in health are acknowledged in many developed countries, whereby disadvantaged groups systematically suffer from worse health outcomes such as lower life expectancy than non-disadvantaged groups. Engaging members of disadvantaged communities in public health initiatives has been suggested as a way to reduce health inequities. This systematic review was conducted to evaluate the effectiveness of public health interventions that engage the community on a range of health outcomes across diverse health issues. METHODS We searched the following sources for systematic reviews of public health interventions: Cochrane CDSR and CENTRAL, Campbell Library, DARE, NIHR HTA programme website, HTA database, and DoPHER. Through the identified reviews, we collated a database of primary studies that appeared to be relevant, and screened the full-text documents of those primary studies against our inclusion criteria. In parallel, we searched the

NHS EED and TRoPHI databases for additional primary studies. For the purposes of these analyses, study design was limited to randomised and non-randomised controlled trials. Only interventions conducted in OECD countries and published since 1990 were included. We conducted a random effects meta-analysis of health behaviour, health consequences, selfefficacy, and social support outcomes, and a narrative summary of community outcomes. We tested a range of moderator variables, with a particular emphasis on the model of community engagement used as a potential moderator of intervention effectiveness. RESULTS Of the 9.467 primary studies scanned, we identified 131 for inclusion in the meta-analysis. The overall effect size for health behaviour outcomes is d = .33 (95% CI .26, .40). The interventions were also effective in increasing health consequences (d = .16, 95% CI .06, .27); health behaviour self-efficacy (d = .41, 95% CI .16, .65) and perceived social support (d = .41, 95% CI .23, .65). Although the type of community engagement was not a significant moderator of effect, we identified some trends across studies. CONCLUSIONS There is solid evidence that community engagement interventions have a positive impact on a range of health outcomes across various conditions. There is insufficient evidence to determine whether one particular model of community engagement is more effective than any other. Database: Medline

### A review of economic evaluations of behavior change interventions : setting an agenda for research methods and practice.

Author(s): Alayli-Goebbels, Adrienne; Evers, Silvia; Alexeeva, Daria Source: Journal of Public Health; 2014; vol. 36 (no. 2); p. 336-344 Publication Date: 2014

Available at Journal of Public Health - from EBSCO (CINAHL Plus with Full Text)

Abstract: BACKGROUND: The objective of this study was to review methodological quality of economic evaluations of lifestyle behavior change interventions (LBCIs) and to examine how they address methodological challenges for public health economic evaluation identified in the literature. METHODS: Pubmed and the NHS economic evaluation database were searched for published studies in six key areas for behavior change: smoking, physical activity, dietary behavior. (illegal) drug use, alcohol use and sexual behavior. From included studies (n = 142). we extracted data on general study characteristics, characteristics of the LBCIs, methodological quality and handling of methodological challenges. RESULTS: Economic evaluation evidence for LBCIs showed a number of weaknesses: methods, study design and characteristics of evaluated interventions were not well reported; methodological quality showed several shortcomings and progress with addressing methodological challenges remained limited. CONCLUSIONS: Based on the findings of this review we propose an agenda for improving future evidence to support decision-making. Recommendations for practice include improving reporting of essential study details and increasing adherence with good practice standards. Recommendations for research methods focus on mapping out complex causal pathways for modeling, developing measures to capture broader domains of wellbeing and community outcomes, testing methods for considering equity, identifying relevant non-health sector costs and advancing methods for evidence synthesis. [Abstract] Database: HMIC

### Other studies

#### Behaviour change programmes and implementation

Supporting effective lifestyle behaviour change interventions.

**Author(s):** Allen, Candia **Source:** Nursing standard (Royal College of Nursing (Great Britain): 1987); 2014; vol. 28 (no. 24); p. 51-58 **Publication Date:** 2014 **Publication Type(s):** Journal Article **PubMedID:** 24517696

Available at Nursing standard (Royal College of Nursing (Great Britain): 1987) - from EBSCO (CINAHL Plus with Full Text)

**Abstract:** Improving the health of the population, and morbidity and mortality associated with non-communicable diseases, is a national priority. Health education and promotion should focus on avoiding harmful behaviours such as excessive alcohol intake, smoking and poor diet. It is argued that each patient contact should involve health promotion and that healthcare professionals should be encouraged to discuss and support effective lifestyle behaviour change interventions. **Database:** Medline

### A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems.

**Author(s):** Atkins, Lou; Francis, Jill; Islam, Rafat; O'Connor, Denise; Patey, Andrea; Ivers, Noah; Foy, Robbie; Duncan, Eilidh M; Colquhoun, Heather; Grimshaw, Jeremy M; Lawton, Rebecca; Michie, Susan **Source:** Implementation science: IS; Jun 2017; vol. 12 (no. 1); p. 77 **Publication Date:** Jun 2017 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article Consensus Development Conference **PubMedID:** 28637486

Available at Implementation science: IS - from ProQuest (Hospital Premium Collection) - NHS Version

Available at Implementation science: IS - from Europe PubMed Central - Open Access

Abstract: BACKGROUND Implementing new practices requires changes in the behaviour of relevant actors, and this is facilitated by understanding of the determinants of current and desired behaviours. The Theoretical Domains Framework (TDF) was developed by a collaboration of behavioural scientists and implementation researchers who identified theories relevant to implementation and grouped constructs from these theories into domains. The collaboration aimed to provide a comprehensive, theory-informed approach to identify determinants of behaviour. The first version was published in 2005, and a subsequent version following a validation exercise was published in 2012. This guide offers practical guidance for those who wish to apply the TDF to assess implementation problems and support intervention design. It presents a brief rationale for using a theoretical approach to investigate and address implementation problems, summarises the TDF and its development, and describes how to apply the TDF to achieve implementation objectives. Examples from the implementation research literature are presented to illustrate relevant methods and practical considerations. METHODS Researchers from Canada, the UK and Australia attended a 3-day meeting in December 2012 to build an international collaboration among researchers and decision-makers interested in the advancing use of the TDF. The participants were experienced in using the TDF to assess implementation problems, design interventions, and/or understand change processes. This guide is an output of the meeting and also draws on the authors' collective experience. Examples from the implementation research literature judged by authors to be representative of specific applications of the TDF are included in this guide. RESULTS We explain and illustrate methods, with a focus on qualitative approaches, for selecting and specifying target behaviours key to implementation, selecting the study design, deciding the sampling strategy, developing

study materials, collecting and analysing data, and reporting findings of TDF-based studies. Areas for development include methods for triangulating data, e.g. from interviews, questionnaires and observation and methods for designing interventions based on TDF-based problem analysis. CONCLUSIONS We offer this guide to the implementation community to assist in the application of the TDF to achieve implementation objectives. Benefits of using the TDF include the provision of a theoretical basis for implementation studies, good coverage of potential reasons for slow diffusion of evidence into practice and a method for progressing from theory-based investigation to intervention. **Database:** Medline

#### Using health psychology to help patients: promoting healthy choices.

**Author(s):** Barley, Elizabeth; Lawson, Victoria **Source:** British journal of nursing (Mark Allen Publishing); Nov 2016; vol. 25 (no. 21); p. 1172-1175 **Publication Date:** Nov 2016 **Publication Type(s):** Journal Article **PubMedID:** 27882790

Available at British Journal of Nursing - from EBSCO (CINAHL Plus with Full Text)

Available at British Journal of Nursing - from Unpaywall

Abstract: This article describes behaviour change techniques that nurses can use to help individual patients to make and stick to healthy choices. These include helping patients to set goals that are specific, measureable, achievable, relevant and timely (SMART), promoting self-monitoring and providing feedback and motivational interviewing. The process for delivering these techniques is described and the evidence for them discussed. Simply providing brief advice and follow up can lead to behaviour change, even in people who have not expressed a desire to change. The techniques are designed to be brief and feasible to use in routine practice. Using them can help nurses to apply the NHS policy of Making Every Contact Count so that their patients achieve long-term benefit. **Database:** Medline

#### Improving cancer control through a community-based cancer awareness initiative.

**Author(s):** Smith, Samuel G; Rendell, Helen; George, Helen; Power, Emily **Source:** Preventive medicine; Mar 2014; vol. 60; p. 121-123 **Publication Date:** Mar 2014 **Publication Type(s):** Research Support, Non-u.s. Gov't Multicenter Study Journal Article **PubMedID:** 24239683

Available at Preventive Medicine - from Unpaywall

**Abstract:** OBJECTIVE To assess the impact of the Cancer Research UK Cancer Awareness Roadshow on intentions to change health behaviours and use local health services related to cancer. METHOD Feedback forms from visitors to three Roadshows collected data on anticipated lifestyle changes and health service use following their visit to the Roadshow. Demographic predictors of intentions were investigated. RESULTS A total of 6009 individuals completed a feedback form. On average, respondents intended to make between two and three (2.55; SD=1.77) lifestyle changes, and use between none and one (0.59; SD=0.77) local health services following their visit. Multivariable analysis showed that age (p=0.001), ethnicity (p=0.006), and occupation (p=0.043) were significant predictors of anticipated lifestyle changes. Anticipated health service use was higher among men (p=0.001), younger groups (p<0.001), and smokers (p<0.001). Overall effects of ethnicity (p=0.001) and occupation (p<0.001) on anticipated health service use were also observed. Post-hoc analyses indicated stronger effects of the Roadshow among disadvantaged groups. CONCLUSION High levels of anticipated health behaviour change and health service use were observed among Roadshow visitors. Disadvantaged groups such as lower socioeconomic groups, ethnic minorities, and smokers showed particularly high levels of intention. A more in-depth evaluation of the Roadshow is warranted. Database: Medline

Are interventions for low-income groups effective in changing healthy eating, physical activity and smoking behaviours? A systematic review and meta-analysis.

**Author(s):** Bull, Eleanor R; Dombrowski, Stephan U; McCleary, Nicola; Johnston, Marie **Source:** BMJ open; Nov 2014; vol. 4 (no. 11); p. e006046 **Publication Date:** Nov 2014 **Publication Type(s):** Meta-analysis Journal Article Review **PubMedID:** 25432903

Available at BMJ open - from BMJ Journals - Open Access

Available at BMJ open - from Unpaywall

**Abstract:** OBJECTIVE To conduct a systematic review and meta-analysis examining the effectiveness of behavioural interventions targeting diet, physical activity or smoking in lowincome adults. DESIGN Systematic review with random effects meta-analyses. Studies before 2006 were identified from a previously published systematic review (searching 1995-2006) with similar but broader inclusion criteria (including non-randomised controlled trials (RCTs)). Studies from 2006 to 2014 were identified from eight electronic databases using a similar search strategy. DATA SOURCESMEDLINE, EMBASE, PsycINFO, ASSIA, CINAHL, Cochrane Controlled Trials, Cochrane Systematic Review and DARE.ELIGIBILITY CRITERIA FOR SELECTING STUDIESRCTs and cluster RCTs published from 1995 to 2014; interventions targeting dietary, physical activity and smoking; low-income adults; reporting of behavioural outcomes. MAIN OUTCOME MEASURES Dietary, physical activity and smoking cessation behaviours. RESULTS 35 studies containing 45 interventions with 17,000 participants met inclusion criteria. At postintervention, effects were positive but small for diet (standardised mean difference (SMD) 0.22, 95% CI 0.14 to 0.29), physical activity (SMD 0.21, 95% CI 0.06 to 0.36) and smoking (relative risk (RR) of 1.59, 95% CI 1.34 to 1.89). Studies reporting follow-up results suggested that effects were maintained over time for diet (SMD 0.16, 95% CI 0.08 to 0.25) but not physical activity (SMD 0.17, 95% CI -0.02 to 0.37) or smoking (RR 1.11, 95% CI 0.93 to 1.34). CONCLUSIONS Behaviour change interventions for low-income groups had small positive effects on healthy eating, physical activity and smoking. Further work is needed to improve the effectiveness of behaviour change interventions for deprived populations.

Database: Medline

#### Improving public health evaluation: a qualitative investigation of practitioners' needs.

Author(s): Denford, Sarah; Lakshman, Rajalakshmi; Callaghan, Margaret; Abraham, Charles Source: BMC public health; Jan 2018; vol. 18 (no. 1); p. 190 Publication Date: Jan 2018 Publication Type(s): Research Support, Non-u.s. Gov't Journal Article PubMedID: 29378553 Available at BMC public health - from ProQuest (Hospital Premium Collection) - NHS Version Available at BMC public health - from Unpaywall

Abstract: BACKGROUND In 2011, the House of Lords published a report on Behaviour Change, in which they report that "a lot more could, and should, be done to improve the evaluation of interventions." This study aimed to undertake a needs assessment of what kind of evaluation training and materials would be of most use to UK public health practitioners by conducting interviews with practitioners about everyday evaluation practice and needed guidance and materials. METHODS Semi-structured interviews were conducted with 32 public health practitioners in two UK regions, Cambridgeshire and the South West. Participants included directors of public health, consultants in public health, health improvement advisors, public health intelligence, and public health research officers. A topic guide included questions designed to explore participants existing evaluation practice and their needs for further training and guidance. Data were analysed using thematic analyses. RESULTS Practitioners highlighted the need for evaluation to defend the effectiveness of existing programs and protect funding provisions. However, practitioners often lacked training in evaluation, and felt unqualified to perform such a task. The majority of practitioners did not use, or were not aware of many

existing evaluation guidance documents. They wanted quality-assured, practical guidance that relate to the real world settings in which they operate. Practitioners also mentioned the need for better links and support from academics in public health. CONCLUSION Whilst numerous guidance documents supporting public health evaluation exist, these documents are currently underused by practitioners - either because they are not considered useful, or because practitioners are not aware of them. Integrating existing guides into a catalogue of guidance documents, and developing a new-quality assured, practical and useful document may support the evaluation of public health programs. This in turn has the potential to identify those programs that are effective; thus improving public health and reducing financial waste.

Database: Medline

### Can Health Trainers Make a Difference With Difficult-to-Engage Clients? A Multisite Case Study.

**Author(s):** Bailey, Di; Kerlin, Lianne **Source:** Health promotion practice; Sep 2015; vol. 16 (no. 5); p. 756-764 **Publication Date:** Sep 2015 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article Evaluation Studies **PubMedID:** 25794692

Available at Health promotion practice - from Unpaywall

Abstract: A political attempt in the United Kingdom to address health inequalities in the past decade has been the government's initiative to employ local health trainers (HTs) or health trainer champions (HTCs) to support disadvantaged individuals with aspects of their health-related behaviors. HT/HTCs provide health-related information and support to individuals with healthy eating, physical activity, and smoking cessation. They undertake community engagement and direct individuals to relevant health services. They differ in that HTs are trained to provide health interventions to individuals or groups and to make referrals to specialist health care services when necessary. This article provides an evaluation of HT/HTCs interventions across three sites, including one prison, one probation service (three teams), and one mental health center. An evaluation framework combining process and outcome measures was employed that used mixed methods to capture data relating to the implementation of the service, including the context of the HT/HTCs interventions, the reactions of their clients, and the outcomes reported. It was found that HT/HTCs interventions were more effective in the prison and mental health center compared with the probation site largely as a result of contextual factors. **Database:** Medline

### How do individuals' health behaviours respond to an increase in the supply of health care? Evidence from a natural experiment.

**Author(s):** Fichera, Eleonora; Gray, Ewan; Sutton, Matt **Source:** Social science & medicine (1982); Jun 2016; vol. 159; p. 170-179 **Publication Date:** Jun 2016 **Publication Type(s):** Journal Article **PubMedID:** 27183132

Available at Social Science & Medicine - from Unpaywall

Abstract: The efficacy of the management of long-term conditions depends in part on whether healthcare and health behaviours are complements or substitutes in the health production function. On the one hand, individuals might believe that improved health care can raise the marginal productivity of their own health behaviour and decide to complement health care with additional effort in healthier behaviours. On the other hand, health care can lower the cost of unhealthy behaviours by compensating for their negative effects. Individuals may therefore reduce their effort in healthier lifestyles. Identifying which of these effects prevails is complicated by the endogenous nature of treatment decisions and individuals' behavioural responses. We explore whether the introduction in 2004 of the Quality and Outcomes Framework (QOF), a financial incentive for family doctors to improve the quality of healthcare, affected the population's weight, smoking and drinking behaviours by applying a sharp regression

discontinuity design to a sample of 32,102 individuals in the Health Survey for England (1997-2009). We find that individuals with the targeted health conditions improved their lifestyle behaviours. This complementarity was only statistically significant for smoking, which reduced by 0.7 cigarettes per person per day, equal to 18% of the mean. We investigate whether this change was attributable to the QOF by testing for other discontinuity points, including the introduction of a smoking ban in 2007 and changes to the QOF in 2006. We also examine whether medication and smoking cessation advice are potential mechanisms and find no statistically significant discontinuities for these aspects of health care supply. Our results suggest that a general improvement in healthcare generated by provider incentives can have positive unplanned effects on patients' behaviours. **Database:** Medline

The effect of a behaviour change intervention on the diets and physical activity levels of women attending Sure Start Children's Centres: results from a complex public health intervention.

Author(s): Baird, Janis; Jarman, Megan; Lawrence, Wendy Source: BMJ Open; 2014; vol. 4 Publication Date: 2014

Abstract: OBJECTIVES: The UK government's response to the obesity epidemic calls for action in communities to improve people's health behaviour. This study evaluated the effects of a community intervention on dietary quality and levels of physical activity of women from disadvantaged backgrounds. DESIGN: Non-randomised controlled evaluation of a complex public health intervention. PARTICIPANTS: 527 women attending Sure Start Children's Centres (SSCC) in Southampton (intervention) and 495 women attending SSCCs in Gosport and Havant (control). INTERVENTION: Training SSCC staff in behaviour change skills that would empower women to change their health behaviours. OUTCOMES: Main outcomes dietary quality and physical activity. Intermediate outcomes self-efficacy and sense of control. RESULTS: 1-year post-training, intervention staff used skills to support behaviour change significantly more than control staff. There were statistically significant reductions of 0.1 SD in the dietary quality of all women between baseline and follow-up and reductions in self-efficacy and sense of control. The decline in self-efficacy and control was significantly smaller in women in the intervention group than in women in the control group (adjusted differences in self-efficacy and control, respectively, 0.26 (95 per cent CI 0.001 to 0.50) and 0.35 (0.05 to 0.65)). A lower decline in control was associated with higher levels of exposure in women in the intervention group. There was a statistically significant improvement in physical activity in the intervention group, with 22.9 per cent of women reporting the highest level of physical activity compared with 12.4 per cent at baseline, and a smaller improvement in the control group. The difference in change in physical activity level between the groups was not statistically significant (adjusted difference 1.02 (0.74 to 1.41)). CONCLUSIONS: While the intervention did not improve women's diets and physical activity levels, it had a protective effect on intermediate factors - control and self-efficacy suggesting that a more prolonged exposure to the intervention might improve health behaviour. Further evaluation in a more controlled setting is justified. [Abstract] **Database:** HMIC

#### Nurses' intentions to give lifestyle support.

Author(s): McKenzie, Karen. Source: Nursing Times; Jun 2014; vol. 110 (no. 26) Publication Date: Jun 2014 Publication Type(s): Article

**Abstract:** Models of behaviour change can help identify factors that influence health behaviours such as eating a healthy diet and physical activity. The Theory of Planned Behaviour has been shown to be relatively effective at predicting people's intention to engage in health-related behaviours. More recent research has explored whether it can help predict the intentions of one group of people to support another group to engage in healthy behaviour. This has implications

for nurses, who are often facilitators of patient health. This article gives an overview of the model and discusses its potential implications for nurses. [Journal abstract] **Database:** HMIC

#### The role of nurse leaders in improving health.

Author(s): Fuller, Sabrina Source: Nursing Times; 2015; vol. 111 (no. 4); p. 12-14 Publication Date: 2015

**Abstract:** Premature deaths could be avoided and NHS resources saved if healthcare staff provided more effective support for people to improve health-related behaviour. All healthcare staff can deliver very brief interventions, which have been proved to have a positive effect. Nurse leaders play a vital role in helping frontline staff deliver behaviour change interventions, and in ensuring support is available for staff to stay healthy. This article - the first in a two-part series - outlines the action nurse leaders need to take. Part 2 (to be published next week) focuses on the role of frontline staff in integrating behaviour change interventions into their clinical work. [Abstract] **Database:** HMIC

### Food for thought: pilot randomized controlled trial of lay health trainers supporting dietary change to reduce cardiovascular disease in deprived communities.

**Author(s):** Goodall, M.; Barton, G.; Bower, P. **Source:** Journal of Public Health; 2014; vol. 36 (no. 4); p. 635-643 **Publication Date:** 2014

Available at Journal of Public Health - from EBSCO (CINAHL Plus with Full Text)

Available at Journal of Public Health - from HighWire - Free Full Text

Abstract: BACKGROUND: Cardiovascular disease (CVD) accounts for 30 per cent of UK deaths. It is associated with modifiable lifestyle factors, including insufficient consumption of fruit and vegetables (F&V). Lay health trainers (LHTs) offer practical support to help people develop healthier behaviour and lifestyles. Our two-group pilot randomized controlled trial (RCT) investigated the effectiveness of LHTs at promoting a heart-healthy lifestyle among adults with at least one risk factor for CVD to inform a full-scale RCT. METHODS: Eligible adults (aged 21-78 years), recruited from five practices serving deprived populations, were randomized to health information leaflets plus LHTs' support for 3 months (n = 76) versus health information leaflets alone (n = 38). RESULTS: We recruited 114 participants, with 60 per cent completing 6 month follow-up. Both groups increased their self-reported F&V consumption and we found no evidence for LHTs' support having significant added impact. Most participants were relatively less deprived, as were the LHTs we were able to recruit and train. CONCLUSIONS: Our pilot demonstrated that an LHT's RCT whilst feasible faces considerable challenges. However, to justify growing investment in LHTs, any behaviour changes and sustained impact on those at greatest need should be demonstrated in an independently evaluated, robust, fully powered RCT. [Abstract] Database: HMIC

### Perspectives of UK Pakistani women on their behaviour change to prevent type 2 diabetes: qualitative study using the theory domain framework.

Author(s): Penn, Linda; Dombrowski, Stephan; Sniehotta, Falko Source: BMJ Open; 2014; vol. 4 Publication Date: 2014

**Abstract:** BACKGROUND: Type 2 diabetes (T2D) is a debilitating disease, highly prevalent in UK South Asians, and preventable by lifestyle intervention. The 'New life, New you' (NLNY) physical activity (PA) and dietary intervention for T2D prevention was culturally adapted to better engage minority ethnic populations and tested for feasibility. OBJECTIVES: To investigate Pakistani female participants' perspectives of their behaviour change and of salient intervention features. SETTING: A community-based 8-week programme of group delivered PA sessions with behavioural counselling and dietary advice, culturally adapted for ethnic minority

populations, in an area of socioeconomic deprivation. Participants to NLNY were recruited through screening events in community venues across the town. PARTICIPANTS: Interviews were conducted with 20 Pakistani female NLNY participants, aged 26-45 (mean 33.5) years, from different parts of town. RESULTS: Within the a priori Theoretical Domains Framework (intentions and goals, reinforcement, knowledge, nature of the activity, social role and identity, social influences, capabilities and skills, regulation and decision, emotion and environment), we identified the importance of social factors relating to participants' own PA and dietary behaviour change. We also identified cross-cutting themes as collateral benefits of the intervention including participants' 'psychological health'; 'responsibility' (for others' health, especially family members included in the new PA and diet regimes) and 'inclusion' (an ethos of accommodating differences). CONCLUSIONS: Our findings suggest that culturally adapted interventions for Pakistani women at risk of T2D, delivered via group PA sessions with counselling and dietary advice, may encourage their PA and dietary behaviour change, and have collateral health and social benefits. The NLNY intervention appeared to be acceptable. We plan to evaluate recruitment, retention and likely effect of the intervention on participant behaviour prior to definitive evaluation. [Abstract] Database: HMIC

Well London Phase-1: results among adults of a cluster-randomised trial of a community engagement approach to improving health behaviours and mental well-being in deprived inner-city neighbourhoods.

Author(s): Phillips, Gemma; Bottomley, Christian; Schmidt, Elena Source: Journal of Epidemiology and Community Health; 2014; vol. 68 (no. 7); p. 606-614 Publication Date: 2014

Abstract: BACKGROUND: We report the main results, among adults, of a cluster-randomisedtrial of Well London, a community engagement programme promoting healthy eating, physical activity and mental well-being in deprived neighbourhoods. The hypothesis was that benefits would be neighbourhood-wide, and not restricted to intervention participants. The trial was part of a multicomponent process/outcome evaluation which included non-experimental components (self-reported behaviour change amongst participants, case studies and evaluations of individual projects) which suggested health, well-being and social benefits to participants. METHODS: Twenty matched pairs of neighbourhoods in London were randomised to intervention/control condition. Primary outcomes (five portions fruit/vegetables/day; 5x30m of moderate intensity physical activity/week, abnormal General Health Questionnaire (GHQ)-12 score and Warwick-Edinburgh Mental Well-being Scale (WEMWBS) score) were measured by post-intervention questionnaire survey, among 3986 adults in a random sample of households across neighbourhoods. RESULTS: There was no evidence of impact on primary outcomes: healthy eating (relative risk [RR] 1.04, 95 per cent CI 0.93 to 1.17); physical activity (RR:1.01, 95 per cent CI 0.88 to 1.16); abnormal GHQ12 (RR:1.15, 95 per cent CI 0.84 to 1.61); WEMWBS (mean difference [MD]: -1.52, 95 per cent CI -3.93 to 0.88). There was evidence of impact on some secondary outcomes: reducing unhealthy eating-score (MD: -0.14, 95 per cent CI -0.02 to 0.27) and increased perception that people in the neighbourhood pulled together (RR: 1.92, 95 per cent CI 1.12 to 3.29). CONCLUSIONS: The trial findings do not provide evidence supporting the conclusion of non-experimental components of the evaluation that intervention improved health behaviours, well-being and social outcomes. Low participation rates and population churn likely compromised any impact of the intervention. Imprecise estimation of outcomes and sampling bias may also have influenced findings. There is a need for greater investment in refining such programmes before implementation; new methods to understand, longitudinally different pathways residents take through such interventions and their outcomes, and new theories of change that apply to each pathway. [Abstract] Database: HMIC

### **Secondary prevention**

Promoting behaviour change in patients with coronary heart disease--a consensus study in two countries with different healthcare systems.

**Author(s):** Byrne, Molly; Campbell, Neil C **Source:** The European journal of general practice; Dec 2003; vol. 9 (no. 4); p. 134-140 **Publication Date:** Dec 2003 **Publication Type(s):** Research Support, Non-u.s. Gov't Comparative Study Journal Article **PubMedID:** 14733401

Available at European Journal of General Practice - from Unpaywall

**Abstract:** BACKGROUND Secondary prevention is an effective strategy for reducing coronary heart disease morbidity and mortality. Secondary prevention in primary care has been shown to be suboptimal. Evidence on approaches to behaviour change, suitable for implementation in primary care, is needed. OBJECTIVE To identify approaches to behaviour change in patients with coronary heart disease that are relevant to primary care and compare the views of health professionals in two different healthcare systems (United Kingdom and the Republic of Ireland). METHODS Two nominal groups were conducted in Northeast Scotland and the West of Ireland with expert panels representing core and extended primary care teams. Participants were asked to generate ideas, rank them, and then discuss areas of disagreement before a second round of ranking. RESULTS In both groups, there was good consensus on items relating to individual patient assessment (including motivation and understanding), addressing the practitioner's willingness to change, using established principles of behaviour change, and having adequate resources, staff and time. Priorities were, however, different. Emphasis on items relating to resources, staff and organisation was particularly strong in the Irish group; there was more emphasis on approaches to behaviour change in the Scottish group. CONCLUSIONS When attempting to promote behaviour change and secondary prevention, there are different priorities in different healthcare systems. These should be taken into account in the design of any intervention. Database: Medline

Study protocol for a randomised controlled trial of brief, habit-based, lifestyle advice for cancer survivors: exploring behavioural outcomes for the Advancing Survivorship Cancer Outcomes Trial (ASCOT).

**Author(s):** Beeken, Rebecca J; Croker, Helen; Heinrich, Maggie; Smith, Lee; Williams, Kate; Hackshaw, Allan; Hines, John; Machesney, Michael; Krishnaswamy, Madhavan; Cavanagh, Sharon; Roylance, Rebecca; Hill, Alison; Pritchard-Jones, Kathy; Wardle, Jane; Fisher, Abigail

**Source:** BMJ open; Nov 2016; vol. 6 (no. 11); p. e011646 **Publication Date:** Nov 2016 **Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Multicenter Study Journal Article **PubMedID:** 27881518

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healthy diet have significant effects on cancer outcomes. There is a need for simple but effective behaviour change interventions with the potential to be implemented within the cancer care pathway. Habit-based advice encourages repetition of a behaviour in a consistent context so that the behaviour becomes increasingly automatic in response to a specific contextual cue. This approach therefore encourages long-term behaviour change and can be delivered through printed materials. 'Healthy Habits for Life' is a brief intervention based on habit theory, and incorporating printed materials plus a personally tailored discussion, that has been designed specifically for patients with a diagnosis of cancer. The aim of this trial was to test the effect of

'Healthy Habits for Life' on a composite health behaviour risk index (CHBRI) over 3 months in patients with a diagnosis of breast, colorectal or prostate cancer. METHOD AND ANALYSISA

Abstract: INTRODUCTION Positive health behaviours such as regular physical activity and a

2-arm, individually randomised controlled trial in patients with breast, colorectal and prostate cancer. Patients will be recruited over 18 months from 7 National Health Service Trusts in London and Essex. Following baseline assessments and allocation to intervention or usual care, patients are followed up at 3 and 6 months. The primary outcome will be change in CHBRI at 3 months. Maintenance of any changes over 6 months, and changes in individual health behaviours (including dietary intake, physical activity, alcohol consumption and smoking status) will also be explored. ETHICS AND DISSEMINATION Ethical approval was obtained through the National Research Ethics Service Committee South Central-Oxford B via the Integrated Research Application System (reference number 14/SC/1369). Results of this study will be disseminated through peer-reviewed publications and scientific presentations. TRIAL REGISTRATION NUMBER17421871. **Database:** Medline

### **Apps and Games**

Opportunities and challenges for smartphone applications in supporting health behavior change: qualitative study.

**Author(s):** Dennison, Laura; Morrison, Leanne; Conway, Gemma; Yardley, Lucy **Source:** Journal of medical Internet research; Apr 2013; vol. 15 (no. 4); p. e86

Publication Date: Apr 2013

Publication Type(s): Research Support, Non-u.s. Gov't Journal Article

PubMedID: 23598614

Available at Journal of medical Internet research - from Europe PubMed Central - Open

Access

Available at Journal of medical Internet research - from Unpaywall

**Abstract:** BACKGROUND There is increasing interest from academics and clinicians in harnessing smartphone applications (apps) as a means of delivering behavioral interventions for health. Despite the growing availability of a range of health-related apps on the market, academic research on the development and evaluation of such apps is in the relatively early stages. A few existing studies have explored the views of various populations on using mobile phones for health-related issues and some studies are beginning to report user feedback on specific apps. However, there remains little in depth research on users' (and potential users') experiences and views on a wide range of features and technologies that apps are, or will soon be, capable of. In particular, research on young adults is lacking, which is an unfortunate omission considering that this group comprises of a good number of mobile technology adoptors. OBJECTIVE The current study sought to explore young adults' perspectives on apps related to health behavior change. It sought their experiences and views of features that might support health behavior change and issues that contribute to interest in and willingness to use such apps. METHODS Four focus groups were conducted with 19 students and staff at a University in the United Kingdom. Participants included 13 females and 6 males with a mean age of 23.79 (SD 7.89). The focus group discussions centred on participants' experiences of using smartphone apps to support a healthy lifestyle, and their interest in and feelings about features and capabilities of such apps. The focus groups were recorded, transcribed, and analyzed using inductive thematic analysis. RESULTS Study findings suggested that young, currently healthy adults have some interest in apps that attempt to support health-related behavior change. Accuracy and legitimacy, security, effort required, and immediate effects on mood emerged as important influences on app usage. The ability to record and track behavior and goals and the ability to acquire advice and information "on the go" were valued. Contextsensing capabilities and social media features tended to be considered unnecessary and offputting. CONCLUSIONS This study provided insight into the opportunities and challenges

involved in delivering health-related behavioral interventions through smartphone apps. The findings suggested a number of valued features and characteristics that app developers may wish to consider when creating health behavior apps. Findings also highlighted several major challenges that appeared to need further consideration and research to ensure the development of effective and well-accepted behavior change apps.

Evaluating mobile phone applications for health behaviour change : a systematic review.

**Author(s):** McKay, Fiona H.; Cheng, Christina; Uccellini, Mary; Stephens, Hugh; Shill, Jane; Wright, Annemarie **Source:** Journal of Telemedicine and Telecare; 2018; vol. 24 (no. 1); p. 22-30 **Publication Date:** 2018

**Abstract:** Introduction Increasing smartphones access has allowed for increasing development and use of smart phone applications (apps). Mobile health interventions have previously relied on voice or text-based short message services (SMS), however, the increasing availability and ease of use of apps has allowed for significant growth of smartphone apps that can be used for health behaviour change. This review considers the current body of knowledge relating to the evaluation of apps for health behaviour change. The aim of this review is to investigate approaches to the evaluation of health apps to identify any current best practice approaches. Method A systematic review was conducted. Data were collected and analysed in September 2016. Thirty-eight articles were identified and have been included in this review. Results Articles were published between 2011- 2016, and 36 were reviews or evaluations of apps related to one or more health conditions, the remaining two reported on an investigation of the usability of health apps. Studies investigated apps relating to the following areas: alcohol, asthma, breastfeeding, cancer, depression, diabetes, general health and fitness, headaches, heart disease, HIV, hypertension, iron deficiency/anaemia, low vision, mindfulness, obesity, pain, physical activity, smoking, weight management and women's health. Conclusion In order to harness the potential of mobile health apps for behaviour change and health, we need better ways to assess the quality and effectiveness of apps. This review is unable to suggest a single best practice approach to evaluate mobile health apps. Few measures identified in this review included sufficient information or evaluation, leading to potentially incomplete and inaccurate information for consumers seeking the best app for their situation. This is further complicated by a lack of regulation in health promotion generally. [Abstract] Database: HMIC

### What is the economic evidence for mHealth? : a systematic review of economic evaluations of mHealth solutions.

**Author(s):** Iribarren, Sarah J.; Cato, Kenrick; Falzon, Louise; Stone, Patricia W. **Source:** PLOS One; 2017; vol. 12 (no. 2) **Publication Date:** 2017

Abstract: BACKGROUND: Mobile health (mHealth) is often reputed to be cost-effective or cost-saving. Despite optimism, the strength of the evidence supporting this assertion has been limited. In this systematic review the body of evidence related to economic evaluations of mHealth interventions is assessed and summarized. METHODS: Seven electronic bibliographic databases, grey literature, and relevant references were searched. Eligibility criteria included original articles, comparison of costs and consequences of interventions (one categorized as a primary mHealth intervention or mHealth intervention as a component of other interventions), health and economic outcomes and published in English. Full economic evaluations were appraised using the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) checklist and The PRISMA guidelines were followed. RESULTS: Searches identified 5902 results, of which 318 were examined at full text, and 39 were included in this review. The 39 studies spanned 19 countries, most of which were conducted in upper and upper-middle income countries (34, 87.2 per cent). Primary mHealth interventions (35, 89.7 per cent), behavior change communication type interventions (e.g., improve attendance rates, medication adherence) (27, 69.2 per cent), and short messaging system (SMS) as the mHealth function

(e.g., used to send reminders, information, provide support, conduct surveys or collect data) (22, 56.4 per cent) were most frequent; the most frequent disease or condition focuses were outpatient clinic attendance, cardiovascular disease, and diabetes. The average percent of CHEERS checklist items reported was 79.6 per cent (range 47.62-100, STD 14.18) and the top quartile reported 91.3-100 per cent. In 29 studies (74.3 per cent), researchers reported that the mHealth intervention was cost-effective, economically beneficial, or cost saving at base case. CONCLUSIONS: Findings highlight a growing body of economic evidence for mHealth interventions. Although all studies included a comparison of intervention effectiveness of a health-related outcome and reported economic data, many did not report all recommended economic outcome items and were lacking in comprehensive analysis. The identified economic evaluations varied by disease or condition focus, economic outcome measurements, perspectives, and were distributed unevenly geographically, limiting formal meta-analysis. Further research is needed in low and low-middle income countries and to understand the impact of different mHealth types. Following established economic reporting guidelines will improve this body of research. [Abstract] **Database:** HMIC

Pilot study of a randomised trial of a guided e-learning health promotion intervention for managers based on management standards for the improvement of employee well-being and reduction of sickness absence: the GEM (Guided E-learning for Managers) study.

**Author(s):** Stansfeld, Stephen A; Berney, Lee; Bhui, Kamaldeep **Source:** Public Health Research; 2015; vol. 3 (no. 9) **Publication Date:** 2015

Abstract: BACKGROUND: Psychosocial work environments influence employee well-being. There is a need for an evaluation of organisational-level interventions to modify psychosocial working conditions and hence employee well-being. OBJECTIVE: To test the acceptability of the trial and the intervention, the feasibility of recruitment and adherence to and likely effectiveness of the intervention within separate clusters of an organisation. DESIGN: Mixed methods: pilot cluster randomised controlled trial and qualitative study (in-depth interviews, focus group and observation). PARTICIPANTS: Employees and managers of a NHS trust. Inclusion criteria were the availability of sickness absence data and work internet access. Employees on long-term sick leave and short-term contracts and those with a notified pregnancy were excluded. INTERVENTION: E-learning program for managers based on management standards over ten weeks, guided by a facilitator and accompanied by face-toface meetings. Three clusters were randomly allocated to receive the guided e-learning intervention; a fourth cluster acted as a control. MAIN OUTCOME MEASURES: Recruitment and participation of employees and managers; acceptability of the intervention and trial; employee subjective well-being using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS); and feasibility of collecting sickness absence data. RESULTS: In total, 424 employees out of 649 approached were recruited and 41 managers out of 49 were recruited from the three intervention clusters. Of those consenting, 350 [83 per cent, 95 per cent confidence interval (CI) 79 per cent to 86 per cent] employees completed the baseline assessment and 291 (69 per cent, 95 per cent CI 64 per cent to 73 per cent) completed the follow-up questionnaires. Sickness absence data were available from human resources for 393 (93 per cent, 95 per cent Cl 90 per cent to 95 per cent) consenting employees. In total, 21 managers adhered to the intervention, completing at least three of the six modules. WEMWBS scores fell slightly in all groups, from 50.4 to 49.0 in the control group and from 51.0 to 49.9 in the intervention group. The overall intervention effect was 0.5 (95 per cent CI -3.2 to 4.2). The fall in WEMWBS score was significantly less among employees whose managers adhered to the intervention than among those employees whose managers did not (-0.7 vs. 1.6, with an adjusted difference of 1.6, 95 per cent CI 0.1 to 3.2). The intervention and trial were acceptable to managers, although our study raises questions about the widely used concept of 'acceptability'. Managers reported insufficient time to engage with the intervention and lack of

senior management 'buy-in'. It was thought that the intervention needed better integration into organisational processes and practice. CONCLUSIONS: The mixed-methods approach proved valuable in illuminating reasons for the trial findings, for unpacking processes of implementation and for understanding the influence of study context. We conclude from the results of our pilot study that further mixed-methods research evaluating the intervention and study design is needed. We found that it is feasible to carry out an economic evaluation of the intervention. We plan a further mixed-methods study to re-evaluate the intervention boosted with additional elements to encourage manager engagement and behaviour change in private and public sector organisations with greater organisational commitment. STUDY REGISTRATION: Current Controlled Trials ISRCTN58661009. FUNDING: This project was funded by the NIHR Public Health Research programme and will be published in full in Public Health Research; Vol. 3, No. 9. See the NIHR Journals Library website for further project information. [Abstract] **Database:** HMIC

### Gamification for health promotion: systematic review of behaviour change techniques in smartphone apps.

**Author(s):** Edwards, E. A.; Lumsden, J.; Rivas, C.; Steed, L.; Edwards, L. A.; Thiyagarajan, A.; Sohanpal, R.; Caton, H.; Griffiths, C. J.; Munafò, M. R.; Taylor, S.; Walton, R. T.

Source: BMJ Open; 2016; vol. 6 (no. 10) Publication Date: 2016

**Abstract:** OBJECTIVE: Smartphone games that aim to alter health behaviours are common, but there is uncertainty about how to achieve this. We systematically reviewed health apps containing gaming elements analysing their embedded behaviour change techniques. METHODS: Two trained researchers independently coded apps for behaviour change techniques using a standard taxonomy. We explored associations with user ratings and price. DATA SOURCES: We screened the National Health Service (NHS) Health Apps Library and all top-rated medical, health and wellness and health and fitness apps (defined by Apple and Google Play stores based on revenue and downloads). We included free and paid English language apps using 'gamification' (rewards, prizes, avatars, badges, leaderboards. competitions, levelling-up or health-related challenges). We excluded apps targeting health professionals. RESULTS: 64 of 1680 (four per cent) health apps included gamification and met inclusion criteria; only three of these were in the NHS Library. Behaviour change categories used were: feedback and monitoring (n=60, 94 per cent of apps), reward and threat (n=52, 81 per cent), and goals and planning (n=52, 81 per cent). Individual techniques were: selfmonitoring of behaviour (n=55, 86 per cent), non-specific reward (n=49, 82 per cent), social support unspecified (n=48, 75 per cent), non-specific incentive (n=49, 82 per cent) and focus on past success (n=47, 73 per cent). Median number of techniques per app was 14 (range: five to 22). Common combinations were: goal setting, self-monitoring, non-specific reward and nonspecific incentive (n=35, 55 per cent); goal setting, self-monitoring and focus on past success (n=33, 52 per cent). There was no correlation between number of techniques and user ratings (p=0.07; rs=0.23) or price (p=0.45; rs=0.10). CONCLUSIONS: Few health apps currently employ gamification and there is a wide variation in the use of behaviour change techniques, which may limit potential to improve health outcomes. We found no correlation between user rating (a possible proxy for health benefits) and game content or price. Further research is required to evaluate effective behaviour change techniques and to assess clinical outcomes. TRIAL REGISTRATION NUMBER: CRD42015029841. [Abstract] Database: HMIC

### **Stop Smoking Services**

Behavior change techniques used by the English Stop Smoking Services and their associations with short-term quit outcomes.

**Author(s):** West, Robert; Walia, Asha; Hyder, Natasha; Shahab, Lion; Michie, Susan **Source:** Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco; Jul 2010; vol. 12 (no. 7); p. 742-747 **Publication Date:** Jul 2010 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article **PubMedID:** 20478957

Abstract: OBJECTIVE To help identify effective components of behavioral support for smoking cessation, this study identified the behavior change techniques (BCTs) specified in the treatment manuals of 43 English Stop Smoking Services (SSSs) and assessed association between inclusion of specific BCTs and SSS success rates. METHODS SSSs (n = 144) were contacted to request their treatment manuals. BCTs included in the manuals were identified using a previously established taxonomy. Associations between inclusion of specific BCTs and short-term (4-week) guit outcomes were assessed. RESULTS Ninety-eight services responded, of which 43 had suitable treatment manuals. Out of 43 possible BCTs, SSS manuals included a mean of 22 (range 9-37). The number of sessions used for delivery of the smoking cessation intervention differed markedly (range 1-13) across services. Nine of the BCTs were significantly associated with both self-reported and carbon monoxide (CO)-verified 4-week guit rates (e.g., strengthen ex-smoker identity, provide rewards contingent on abstinence, advise on medication, measure CO) and a further 5 were associated with CO-verified 4-week guit rates but not selfreported quit rates (e.g., advise on/facilitate use of social support, provide reassurance). SSSs that scheduled in more sessions had higher quit rates. CONCLUSIONS English SSSs vary widely in how far their treatment manuals include specific behavior change techniques and how many do not have manuals. It is possible to identify BCTs that are reliably associated with better guit outcomes. Behavioral support for smoking cessation could be improved by a more systematic approach to identifying and applying BCTs that are associated with better guit outcomes. Database: Medline

Behaviour change intervention for smokeless tobacco cessation: its development, feasibility and fidelity testing in Pakistan and in the UK.

**Author(s):** Siddiqi, Kamran; Dogar, Omara; Rashid, Rukhsana; Jackson, Cath; Kellar, Ian; O'Neill, Nancy; Hassan, Maryam; Ahmed, Furqan; Irfan, Muhammad; Thomson, Heather; Khan, Javaid

**Source:** BMC public health; Jun 2016; vol. 16; p. 501 **Publication Date:** Jun 2016 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article **PubMedID:** 27287429

Available at BMC public health - from ProQuest (Hospital Premium Collection) - NHS Version

Available at BMC public health - from Europe PubMed Central - Open Access

Available at BMC public health - from Unpaywall

Abstract: BACKGROUND People of South Asian-origin are responsible for more than threequarters of all the smokeless tobacco (SLT) consumption worldwide; yet there is little evidence on the effect of SLT cessation interventions in this population. South Asians use highly addictive and hazardous SLT products that have a strong socio-cultural dimension. We designed a bespoke behaviour change intervention (BCI) to support South Asians in quitting SLT and then evaluated its feasibility in Pakistan and in the UK. METHODS We conducted two literature reviews to identify determinants of SLT use among South Asians and behaviour change techniques (BCTs) likely to modify these, respectively. Iterative consensus development workshops helped in selecting potent BCTs for BCI and designing activities and materials to deliver these. We piloted the BCI in 32 SLT users. All BCI sessions were audiotaped and analysed for adherence to intervention content and the quality of interaction (fidelity index). Indepth interviews with 16 participants and five advisors assessed acceptability and feasibility of delivering the BCI, respectively. Quit success was assessed at 6 months by saliva/urine cotinine.RESULTS The BCI included 23 activities and an interactive pictorial resource that supported these. Activities included raising awareness of the harms of SLT use and benefits of quitting, boosting clients' motivation and self-efficacy, and developing strategies to manage their triggers, withdrawal symptoms, and relapse should that occur. Betel guid and Guthka were the common forms of SLT used. Pakistani clients were more SLT dependent than those in the UK. Out of 32, four participants had undetectable cotinine at 6 months. Fidelity scores for each site varied between 11.2 and 42.6 for adherence to content - maximum score achievable 44; and between 1.4 and 14 for the quality of interaction - maximum score achievable was 14. Interviews with advisors highlighted the need for additional training on BCTs, integrating nicotine replacement and reducing duration of the pre-quit session. Clients were receptive to health messages but most reported SLT reduction rather than complete cessation. CONCLUSION We developed a theory-based BCI that was also acceptable and feasible to deliver with moderate fidelity scores. It now needs to be evaluated in an effectiveness trial.

Database: Medline

Identifying Well-Connected Opinion Leaders for Informal Health Promotion: The Example of the ASSIST Smoking Prevention Program.

Author(s): Holliday, Jo; Audrey, Suzanne; Campbell, Rona; Moore, Laurence Source: Health communication; Aug 2016; vol. 31 (no. 8); p. 946-953 Publication Date: Aug 2016 Publication Type(s): Research Support, Non-u.s. Gov't Randomized Controlled Trial Journal Article

PubMedID: 26699125

Available at Health communication - from Unpaywall

**Abstract:** Methods used to select opinion leaders for informal behavior change interventions vary, affecting the role they adopt and the outcomes of interventions. The development of successful identification methods requires evidence that these methods achieve their aims. This study explored whether the "whole community" nomination process used in the ASSIST smoking prevention program successfully identified "peer supporters" who were well placed within their school social networks to diffuse an antismoking message to their peers. Data were collected in the United Kingdom during A Stop Smoking in Schools Trial. Behavioral data were provided at baseline and post intervention by all students. Social network data were provided post intervention by students in four control and six intervention schools. Centrality measures calculated using UCINET demonstrate that the ASSIST nomination process successfully identified peer supporters who were more socially connected than others in their year and who had social connections across the entire year group including the program's target group. The results indicate that three simple questions can identify individuals who are held in high esteem by their year group and who also have the interpersonal networks required of opinion leaders to successfully disseminate smoke-free messages through their social networks. This approach could be used in other informal health promotion initiatives. Database: Medline

### **Physical Activity**

Increasing the frequency of physical activity very brief advice for cancer patients. Development of an intervention using the behaviour change wheel.

Author(s): Webb, J; Foster, J; Poulter, E Source: Public health; Apr 2016; vol. 133; p. 45-56 Publication Date: Apr 2016 Publication Type(s): Research Support, Non-u.s. Gov't Journal

Article PubMedID: 26822162

Available at Public Health - from Unpaywall

**Abstract:** BACKGROUND Being physically active has multiple benefits for cancer patients. Despite this only 23% are active to the national recommendations and 31% are completely inactive. A cancer diagnosis offers a teachable moment in which patients might be more receptive to lifestyle changes. Nurses are well placed to offer physical activity advice, however, only 9% of UK nurses involved in cancer care talk to all cancer patients about physical activity. A change in the behaviour of nurses is needed to routinely deliver physical activity advice to

cancer patients. As recommended by the Medical Research Council, behavioural change interventions should be evidenced-based and use a relevant and coherent theoretical framework to stand the best chance of success. OBJECTIVE This paper presents a case study on the development of an intervention to improve the frequency of delivery of very brief advice (VBA) on physical activity by nurses to cancer patients, using the Behaviour Change Wheel (BCW). METHOD The eight composite steps outlined by the BCW guided the intervention development process. An iterative approach was taken involving key stakeholders (n = 45), with four iterations completed in total. This was not defined a priori but emerged during the development process. RESULTS A 60 min training intervention, delivered in either a face-toface or online setting, with follow-up at eight weeks, was designed to improve the capability, opportunity and motivation of nurses to deliver VBA on physical activity to people living with cancer. This intervention incorporates seven behaviour change techniques of goal setting coupled with commitment; instructions on how to perform the behaviour; salience of the consequences of delivering VBA; a demonstration on how to give VBA, all delivered via a credible source with objects added to the environment to support behavioural change. CONCLUSION The BCW is a time consuming process, however, it provides a useful and comprehensive framework for intervention development and greater control over intervention replication and evaluation. Database: Medline

### Stand More AT Work (SMArT Work): using the behaviour change wheel to develop an intervention to reduce sitting time in the workplace.

**Author(s):** Munir, Fehmidah; Biddle, Stuart J H; Davies, Melanie J; Dunstan, David; Esliger, David; Gray, Laura J; Jackson, Ben R; O'Connell, Sophie E; Yates, Tom; Edwardson, Charlotte L **Source:** BMC public health; Mar 2018; vol. 18 (no. 1); p. 319 **Publication Date:** Mar 2018 **Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Journal Article **PubMedID:** 29510715

Available at BMC public health - from ProQuest (Hospital Premium Collection) - NHS Version Available at BMC public health - from Europe PubMed Central - Open Access

Abstract: BACKGROUND Sitting (sedentary behaviour) is widespread among desk-based office workers and a high level of sedentary behaviour is a risk factor for poor health. Reducing workplace sitting time is therefore an important prevention strategy. Interventions are more likely to be effective if they are theory and evidence-based. The Behaviour Change Wheel (BCW) provides a framework for intervention development. This article describes the development of the Stand More AT Work (SMArT Work) intervention, which aims to reduce sitting time among National Health Service (NHS) office-based workers in Leicester, UK. METHODS We followed the BCW guide and used the Capability, Opportunity and Motivation Behaviour (COM-B) model to conduct focus group discussions with 39 NHS office workers. With these data we used the taxonomy of Behaviour Change Techniques (BCTv1) to identify the most appropriate strategies for facilitating behaviour change in our intervention. To identify the best method for participants to self-monitor their sitting time, a sub-group of participants (n = 31) tested a number of electronic self-monitoring devices. RESULTS From our BCW steps and the BCT-Taxonomy we identified 10 behaviour change strategies addressing environmental (e.g. provision of height adjustable desks,), organisational (e.g. senior management support, seminar), and individual level (e.g. face-to-face coaching session) barriers. The Darma cushion scored the highest for practicality and acceptability for self-monitoring sitting. CONCLUSION The BCW guide, COM-B model and BCT-Taxonomy can be applied successfully in the context of designing a workplace intervention for reducing sitting time through standing and moving more. The intervention was developed in collaboration with office workers (a participatory approach) to ensure relevance for them and their work situation. The effectiveness of this

intervention is currently being evaluated in a randomised controlled trial. TRIAL REGISTRATIONISRCTN10967042. Registered on 2 February 2015. **Database:** Medline

Numbers are not the whole story: a qualitative exploration of barriers and facilitators to increased physical activity in a primary care based walking intervention.

**Author(s):** Normansell, Rebecca; Smith, Jaime; Victor, Christina; Cook, Derek G; Kerry, Sally; Iliffe, Steve; Ussher, Michael; Fox-Rushby, Julia; Whincup, Peter; Harris, Tess

Source: BMC public health; Dec 2014; vol. 14; p. 1272 Publication Date: Dec 2014

Publication Type(s): Research Support, Non-u.s. Gov't Randomized Controlled Trial Journal

Article

PubMedID: 25511452

Available at BMC public health - from ProQuest (Hospital Premium Collection) - NHS Version Available at BMC public health - from Unpaywall

Abstract: BACKGROUND The majority of mid-life and older adults in the UK are not achieving recommended physical activity levels and inactivity is associated with many health problems. Walking is a safe, appropriate exercise. The PACE-UP trial sought to increase walking through the structured use of a pedometer and handbook, with and without support from a practice nurse trained in behaviour change techniques (BCTs). Understanding barriers and facilitators to engagement with a primary care based physical activity intervention is essential for future trials and programmes. METHODS We conducted semi-structured telephone interviews using a topic guide with purposive samples of participants who did and did not increase their walking from both intervention groups. Interviews were audio-recorded, transcribed and coded independently by researchers prior to performing a thematic analysis. Responsiveness to the specific BCTs used was also analysed. RESULTS Forty-three trial participants were interviewed in early 2014. Almost all felt they had benefitted, irrespective of their change in step-count, and that primary care was an appropriate setting. Important facilitators included a desire for a healthy lifestyle, improved physical health, enjoyment of walking in the local environment, having a flexible routine allowing for an increase in walking, appropriate self and external monitoring and support from others. Important barriers included physical health problems, an inflexible routine, work and other commitments, the weather and a mistrust of the monitoring equipment. BCTs that were reported to have the most impact included: providing information about behaviour-health link; prompting self-monitoring and review of goals and outcomes; providing feedback; providing specific information about how to increase walking; planning social support/change; and relapse prevention. Rewards were unhelpful. CONCLUSIONS Despite our expectation that there would be a difference between the experiences of those who did and did not objectively increase their walking, we found that most participants considered themselves to have succeeded in the trial and benefitted from taking part. Barriers and facilitators were similar across demographic groups and trial outcomes. Findings indicated several BCTs on which PA trial and programme planners could focus efforts with the expectation of greatest impact as well as strong support for primary care as an appropriate venue. TRIAL REGISTRATIONISRCTN98538934. Database: Medline

Protocol for the 'Virtual Traveller' cluster-randomised controlled trial: a behaviour change intervention to increase physical activity in primary-school Maths and English lessons.

**Author(s):** Norris, E; Dunsmuir, S; Duke-Williams, O; Stamatakis, E; Shelton, N **Source:** BMJ open; Jun 2016; vol. 6 (no. 6); p. e011982 **Publication Date:** Jun 2016 **Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Multicenter Study Journal Article **PubMedID:** 27354084

Available at BMJ open - from BMJ Journals - Open Access

Available at BMJ open - from Unpaywall

Abstract: INTRODUCTION Physical activity (PA) has been shown to be an important factor for health and educational outcomes in children. However, a large proportion of children's school day is spent in sedentary lesson-time. There is emerging evidence about the effectiveness of physically active lessons: integrating physical movements and educational content in the classroom. 'Virtual Traveller' is a novel 6-week intervention of 10-min sessions performed 3 days per week, using classroom interactive whiteboards to integrate movement into primaryschool Maths and English teaching. The primary aim of this project is to evaluate the effect of the Virtual Traveller intervention on children's PA, on-task behaviour and student engagement. METHODS AND ANALYSIS This study will be a cluster-randomised controlled trial with a waiting-list control group. Ten year 4 (aged 8-9 years) classes across 10 primary schools will be randomised by class to either the 6-week Virtual Traveller intervention or the waiting-list control group. Data will be collected 5 times: at baseline, at weeks 2 and 4 of the intervention, and 1 week and 3 months postintervention. At baseline, anthropometric measures, 4-day objective PA monitoring (including 2 weekend days; Actigraph accelerometer), PA and on-task behaviour observations and student engagement questionnaires will be performed. All but anthropometric measures will be repeated at all other data collection points. Changes in overall PA levels and levels during different time-periods (eg, lesson-time) will be examined. Changes in on-task behaviour and student engagement between intervention groups will also be examined. Multilevel regression modelling will be used to analyse the data. Process evaluation will be carried out during the intervention period. ETHICS AND DISSEMINATION The results of this study will be disseminated through peer-review publications and conference presentations. Ethical approval was obtained through the University College London Research Ethics Committee (reference number: 3500-004). Database: Medline

### How do brochures encourage walking in natural environments in the UK? A content analysis.

Author(s): Elliott, Lewis R; White, Mathew P; Taylor, Adrian H; Abraham, Charles

**Source:** Health promotion international; Apr 2018; vol. 33 (no. 2); p. 299-310 **Publication Date:** Apr 2018 **Publication Type(s):** Journal Article **PubMedID:** 27794534

Available at Health promotion international - from Unpaywall

**Abstract:** Although walking for leisure can support health, there has been little systematic attempt to consider how recreational walking is best promoted. In the UK, local authorities create promotional materials for walking networks, but little is known about whether they effectively encourage walking through persuasive messaging. Many of these materials pertain to walks in natural environments which evidence suggests are generally visited less frequently by physically inactive individuals. Consequently the present study explores whether and how recreational walking brochures use persuasive messages in their promotion of walks in natural environments. A coding taxonomy was developed to classify text in recreational walking brochures according to five behavioural content areas and 87 categories of potentially persuasive messages. Reliability of the taxonomy was ascertained and a quantitative content analysis was applied to 26 brochures collected from Devon, UK. Brochures often provided information about an advertised route, highlighted cultural and aesthetic points of interest, and provided directions. Brochures did not use many potentially effective messages. Text seldom prompted behaviour change or built confidence for walking. Social norm related information was rarely provided and there was a general lack of information on physical activity and its benefits for health and well-being. The limited range of message strategies used in recreational walking brochures may not optimally facilitate walking in natural environments for inactive people. Future research should examine the effects of theory-informed brochures on walking intentions

and behaviour. The taxonomy could be adapted to suit different media and practices surrounding physical activity in natural environments. **Database:** Medline

An experimental test of control theory-based interventions for physical activity.

Author(s): Prestwich, Andrew; Conner, Mark; Hurling, Robert; Ayres, Karen; Morris, Ben

**Source:** British journal of health psychology; Nov 2016; vol. 21 (no. 4); p. 812-826 **Publication Date:** Nov 2016 **Publication Type(s):** Randomized Controlled Trial Journal Article **PubMedID:** 27169809

Available at British journal of health psychology - from Unpaywall

**Abstract:** OBJECTIVES To provide an experimental test of control theory to promote physical activity. DESIGN Parallel groups, simple randomized design with an equal chance of allocation to any group. METHODS Participants not meeting recommended levels of physical activity but physically safe to do so (N = 124) were recruited on a UK university campus and randomized to goal-setting + self-monitoring + feedback (GS + SM + F, n = 40), goal-setting + self-monitoring (GS + SM, n = 40), or goal-setting only (GS, n = 44) conditions that differentially tapped the key features of control theory. Accelerometers assessed physical activity (primary outcome) as well as self-report over a 7-day period directly before/after the start of the intervention. RESULTS The participants in the GS + SM + F condition significantly outperformed those in the GS condition, d = 0.62, 95% CI d = 0.15-1.08, and marginally outperformed those in the GS + SM condition in terms of total physical activity at follow-up on the accelerometer measure, d = 0.33, 95% CI d = -0.13 to 0.78. The feedback manipulation (GS + SM + F vs. GS + SM and GS) was most effective when baseline intentions were weak. These patterns did not emerge on the selfreport measure but, on the basis of this measure, the feedback manipulation increased the risk that participants coasted in relation to their goal in the first few days of the intervention period. CONCLUSIONS Using behaviour change techniques consistent with control theory can lead to significant short-term improvements on objectively assessed physical activity. Further research is needed to examine the underlying theoretical principles of the model. Statement of contribution What is already known on this subject? Interventions incorporating more techniques that are consistent with control theory are associated with larger positive changes in health behaviours and related outcomes (see reviews by Dombrowski et al., ; Michie et al., ). However, none of the studies included in these reviews were explicitly based on control theory (see Prestwich et al., ). What does this study add? This study is the first experimental test of the cumulative effects of behaviour change techniques as proposed by control theory. Intervening on all aspects of the feedback loop noted by control theory leads to more change; however, the risk that some participants coast in relation to their set goal is significant. This approach increased physical activity more in those with weaker intentions pre-intervention. **Database:** Medline

'On Your Feet to Earn Your Seat': update to randomised controlled trial protocol.

Author(s): Gardner, Benjamin; Smith, Lee; Aggio, Daniel; Iliffe, Steve; Fox, Kenneth R; Jefferis, Barbara J; Hamer, Mark Source: Trials; Aug 2015; vol. 16; p. 330 Publication Date: Aug 2015

**Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Clinical Trial Multicenter Study Journal Article **PubMedID:** 26242218

Available at Trials - from Europe PubMed Central - Open Access

Available at Trials - from Unpaywall

**Abstract:** BACKGROUND This update describes changes to procedures for our randomised controlled trial of 'On Your Feet to Earn Your Seat', a habit-based intervention to reduce sedentary behaviour in older adults. Some of the amendments have arisen from the addition of

new sites, each offering different possibilities and constraints for study procedures. Others have been made in response to problems encountered in administering intended recruitment procedures at the London sites described in our original protocol. All changes have received ethics and governance clearance, and were made before or during data collection and prior to analyses. METHODS/DESIGN Five non-London UK NHS-based sites (three general practices, one hospital, one NHS Foundation Trust) have been added to the study, each employing locally-tailored variations of recruitment and data collection procedures followed at the London sites. In contrast to the London sites, accelerometry data are not being collected nor are shopping vouchers being given to participants at the new sites. Data collection was delayed at the London sites because of technical difficulties in contacting participants. Subsequently, a below-target sample size was achieved at the London sites (n = 23), and recruitment rates cannot be estimated. Additionally, the physical inactivity inclusion criterion (i.e., <30 consecutive minutes of leisure time activity) has been removed from all sites, because we found that participants at the London sites meeting this criterion at consent subsequently reported activity above this threshold at the baseline assessment. CONCLUSION This is primarily a feasibility trial. The addition of new sites, each employing different study procedures, offers the opportunity to assess the feasibility of alternative recruitment and data collection methods, so enriching the informational value of our analyses of primary outcomes. Recruitment has finished, and the coincidence of a small sample at the London sites with addition of new sites has ensured a final sample size similar to our original target. TRIAL REGISTRATION Current Controlled Trials ISRCTN47901994 (registration date: 16th January 2014). Database: Medline

### What interventions are used to improve exercise adherence in older people and what behavioural techniques are they based on? : a systematic review.

Author(s): Room, Jonathan; Hannink, Erin; Dawes, Helen; Barker, Karen Source: BMJ Open; 2017; vol. 7 (no. 12) Publication Date: 2017

**Abstract:** OBJECTIVES: To conduct a systematic review of interventions used to improve exercise adherence in older people, to assess the effectiveness of these interventions and to evaluate the behavioural change techniques underpinning them using the Behaviour Change Technique Taxonomy (BCTT). DESIGN: Systematic review. METHODS: A search was conducted on AMED, BNI, CINAHL, EMBASE, MEDLINE and PsychINFO databases. Randomised controlled trials that used an intervention to aid exercise adherence and an exercise adherence outcome for older people were included. Data were extracted with the use of a preprepared standardised form. Risk of bias was assessed with the Cochrane Collaboration's tool for assessing risk of bias. Interventions were classified according to the BCTT. RESULTS: Eleven studies were included in the review. Risk of bias was moderate to high. Interventions were classified into the following categories: comparison of behaviour. feedback and monitoring, social support, natural consequences, identity and goals and planning. Four studies reported a positive adherence outcome following their intervention. Three of these interventions were categorised in the feedback and monitoring category. Four studies used behavioural approaches within their study. These were social learning theory, socioemotional selectivity theory, cognitive behavioural therapy and self-efficacy. Seven studies did not report a behavioural approach. CONCLUSIONS: Interventions in the feedback and monitoring category showed positive outcomes, although there is insufficient evidence to recommend their use currently. There is need for better reporting, use and the development of theoretically derived interventions in the field of exercise adherence for older people. Robust measures of adherence, in order to adequately test these interventions would also be of use. PROSPERO REGISTRATION NUMBER: CRD42015020884. [Abstract] Database: HMIC

### **Pregnancy & Postnatal**

Behaviour change techniques to change the postnatal eating and physical activity behaviours of women who are obese: a qualitative study.

Author(s): Smith, D M; Taylor, W; Lavender, T

**Source:** BJOG: an international journal of obstetrics and gynaecology; Jan 2016; vol. 123 (no. 2); p. 279-284 **Publication Date:** Jan 2016 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article **PubMedID:** 26537206

Available at BJOG: an international journal of obstetrics and gynaecology - from Wiley Online Library Free Content - NHS

**Abstract:** OBJECTIVE To explore the experiences of postnatal women who are obese [body mass index (BMI) ≥ 30 kg/m(2) ] in relation to making behaviour changes and use of behaviour change techniques (BCTs). DESIGN Qualitative interview study. SETTING Greater Manchester, UK.POPULATION OR SAMPLE Women who were 1 year postnatal aged ≥18 years, who had an uncomplicated singleton pregnancy, and an antenatal booking BMI ≥ 30 kg/m(2) .METHODS Eighteen semi-structured, audio-recorded interviews were conducted by a research midwife with women who volunteered to be interviewed 1 year after taking part in a pilot randomised controlled trial. The six stages of thematic analysis were followed to understand the qualitative data. The Behavior Change Technique Taxonomy (version 1) was used to label the behaviour change techniques (BCTs) reported by women. MAIN OUTCOME MEASURES Themes derived from 1-year postnatal interview transcripts. RESULTS Two themes were evident: 1. A focused approach to postnatal weight management: women reported making specific changes to their eating and physical activity behaviours, and 2. Need for support: six BCTs were reported as helping women make changes to their eating and physical activity behaviours; three were reported more frequently than others: Self-monitoring of behaviour (2.3), Prompts/cues (7.1) and Social support (unspecified; 3.1). All of the BCTs required support from others for their delivery; food diaries were the most popular delivery method. CONCLUSION Behaviour change techniques are useful to postnatal women who are obese, and have the potential to improve their physical and mental wellbeing. Midwives and obstetricians should be aware of such techniques, to encourage positive changes. Database: Medline

Healthy eating and lifestyle in pregnancy (HELP): a protocol for a cluster randomised trial to evaluate the effectiveness of a weight management intervention in pregnancy.

**Author(s):** John, Elinor; Cassidy, Dunla M; Playle, Rebecca; Jewell, Karen; Cohen, David; Duncan, Donna; Newcombe, Robert G; Busse, Monica; Owen-Jones, Eleri; Williams, Nefyn; Longo, Mirella; Avery, Amanda; Simpson, Sharon A **Source:** BMC public health; May 2014; vol. 14; p. 439

**Publication Date:** May 2014 **Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Journal Article **PubMedID:** 24886352

Available at BMC public health - from ProQuest (Hospital Premium Collection) - NHS Version Available at BMC public health - from Unpaywall

**Abstract:** BACKGROUND Approximately 1 in 5 pregnant women in the United Kingdom are obese. In addition to being associated generally with poor health, obesity is known to be a contributing factor to pregnancy and birth complications and the retention of gestational weight can lead to long term obesity. This paper describes the protocol for a cluster randomised trial to evaluate whether a weight management intervention for obese pregnant women is effective in reducing women's Body Mass Index at 12 months following birth. METHODS/DESIGN The study is a cluster randomised controlled trial involving 20 maternity units across England and Wales. The units will be randomised, 10 to the intervention group and 10 to the control group.

570 pregnant women aged 18 years or over, with a Body Mass Index of +/=30 (kg/m2) and between 12 and 20 weeks gestation will be recruited. Women allocated to the control group will receive usual care and two leaflets giving advice on diet and physical activity. In addition to their usual care and the leaflets, women allocated to the intervention group will be offered to attend a weekly 1.5 hour weight management group, which combines expertise from Slimming World with clinical advice and supervision from National Health Service midwives, until 6 weeks postpartum. Participants will be followed up at 36 weeks gestation and at 6 weeks, 6 months and 12 months postpartum. Body Mass Index at 12 months postpartum is the primary outcome. Secondary outcomes include pregnancy weight gain, quality of life, mental health, waist-hip ratio, child weight centile, admission to neonatal unit, diet, physical activity levels, pregnancy and birth complications, social support, self-regulation and self-efficacy. A cost effectiveness analysis and process evaluation will also be conducted. DISCUSSION This study will evaluate the effectiveness of a theory-based intervention developed for obese pregnant women. If successful the intervention will equip women with the necessary knowledge and skills to enable them to make healthier choices for themselves and their unborn child. TRIAL REGISTRATION Current Controlled Trials: ISRCTN25260464 Date of registration: 16th April 2010. **Database:** Medline

### Barriers to and facilitators of smoking cessation in pregnancy and following childbirth: literature review and qualitative study.

**Author(s):** Bauld, Linda; Graham, Hilary; Sinclair, Lesley; Flemming, Kate; Naughton, Felix; Ford, Allison; McKell, Jennifer; McCaughan, Dorothy; Hopewell, Sarah; Angus, Kathryn; Eadie, Douglas; Tappin, David **Source:** Health technology assessment (Winchester, England); Jun 2017; vol. 21 (no. 36); p. 1-158 **Publication Date:** Jun 2017 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article Review **PubMedID:** 28661375

Available at Health technology assessment (Winchester, England) - from Unpaywall

Abstract: BACKGROUND Although many women stop smoking in pregnancy, others continue, causing harm to maternal and child health. Smoking behaviour is influenced by many factors, including the role of women's significant others (SOs) and support from health-care professionals (HPs). OBJECTIVES To enhance understanding of the barriers to, and facilitators of, smoking cessation and the feasibility and acceptability of interventions to reach and support pregnant women to stop smoking. DESIGN Four parts: (1) a description of interventions in the UK for smoking cessation in pregnancy; (2) three systematic reviews (syntheses) of qualitative research of women's, SOs' and HPs' views of smoking in pregnancy using meta-ethnography (interpretative approach for combining findings); (3) semistructured interviews with pregnant women, SOs and HPs, guided by the social-ecological framework (conceptualises behaviour as an outcome of individuals' interactions with environment); and (4) identification of new/improved interventions for future testing SETTING Studies in reviews conducted in high-income countries. Qualitative research was conducted from October 2013 to December 2014 in two mixed urban/rural study sites: area A (Scotland) and area B (England).PARTICIPANTS Thirty-eight studies (1100 pregnant women) in 42 papers, nine studies (150 partners) in 14 papers and eight studies described in nine papers (190 HPs) included in reviews. Forty-one interviews with pregnant women, 32 interviews with pregnant women's SOs and 28 individual/group interviews with 48 HPs were conducted. MAIN OUTCOME MEASURES The perceived barriers to, and facilitators of, smoking cessation in pregnancy and the identification of potential new/modified interventions. RESULTS Syntheses identified smoking-related perceptions and experiences for pregnant women and SOs that were fluid and context dependent with the capacity to help or hinder smoking cessation. Themes were analysed in accordance with the social-ecological framework levels. From the analysis of the interviews, the themes that were central to cessation in pregnancy at an individual level, and that reflected the findings from the reviews, were perception of risk to baby, self-efficacy, influence of close relationships and smoking as a way of

coping with stress. Overall, pregnant smokers were faced with more barriers than facilitators. At an interpersonal level, partners' emotional and practical support, willingness to change smoking behaviour and role of smoking within relationships were important. Across the review and interviews of HPs, education to enhance knowledge and confidence in delivering information about smoking in pregnancy and the centrality of the client relationship, protection of which could be a factor in downplaying risks, were important. HPs acknowledged that they could best assist by providing support and understanding, and access to effective interventions, including an opt-out referral pathway to Stop Smoking Services, routine carbon monoxide screening, behavioural support and access to pharmacotherapy. Additional themes at community, organisational and societal levels were also identified. LIMITATIONS Limitations include a design grounded in qualitative studies, difficulties recruiting SOs, and local service configurations and recruitment processes that potentially skewed the sample. CONCLUSIONS Perceptions and experiences of barriers to and facilitators of smoking cessation in pregnancy are fluid and context dependent. Effective interventions for smoking cessation in pregnancy should take account of the interplay between the individual, interpersonal and environmental aspects of women's lives. FUTURE WORK Research focus: removing barriers to support, improving HPs' capacity to offer accurate advice, and exploration of weight concerns and relapse prevention. Interventions focus: financial incentives, self-help and social network interventions. STUDY REGISTRATION This study is registered as PROSPERO CRD42013004170.FUNDINGThe National Institute for Health Research Health Technology Assessment programme. Database: Medline

#### **CASH Services**

'They've invited me into their world': a focus group with clinicians delivering a behaviour change intervention in a UK contraceptive service.

Author(s): Martin, Jilly; Sheeran, Paschal; Slade, Pauline

Source: Psychology, health & medicine; Feb 2017; vol. 22 (no. 2); p. 250-254

Publication Date: Feb 2017

Publication Type(s): Journal Article

PubMedID: 27712085

Available at Psychology, Health & Medicine - from EBSCO (CINAHL Plus with Full Text)

Available at Psychology, Health & Medicine - from Unpaywall

Abstract: Although teenage conceptions rates in the United Kingdom (UK) have seen a downward trend recently, it remains imperative that contraceptive services for young people continue to improve. To ensure that evidence-based interventions are sustained in clinical practice, it is useful to assess the experiences of those delivering them. This study explores the experiences of sexual health clinicians who were trained to deliver a one-to-one behaviour change intervention aiming to improve contraceptive use in young women. The intervention was set in a UK NHS contraceptive and sexual health service and involved clinicians' facilitating (within one-to-one consultations) the formation of implementation intentions (or 'if-then' plans) that specified when, where and how young women would use contraception. A focus group was conducted with seven clinicians who had delivered the intervention. A thematic analysis of the focus group revealed three overall themes: (1) How the intervention worked in practice; (2) barriers and benefits to delivering the intervention; and (3) positive changes to individual consultation style and wider 'best practice' within the clinic. Our findings show that, with support,

clinical staff would be in favour of incorporating if-then planning as a strategy to help promote contraceptive adherence in young women. **Database:** Medline

#### **Diabetes**

Improving Diabetes care through Examining, Advising, and prescribing (IDEA): protocol for a theory-based cluster randomised controlled trial of a multiple behaviour change intervention aimed at primary healthcare professionals.

**Author(s):** Presseau, Justin; Hawthorne, Gillian; Sniehotta, Falko F; Steen, Nick; Francis, Jill J; Johnston, Marie; Mackintosh, Joan; Grimshaw, Jeremy M; Kaner, Eileen; Elovainio, Marko; Deverill, Mark; Coulthard, Tom; Brown, Heather; Hunter, Margaret; Eccles, Martin P

**Source:** Implementation science: IS; May 2014; vol. 9; p. 61 **Publication Date:** May 2014 **Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Multicenter Study Journal Article **PubMedID:** 24886606

Available at Implementation science: IS - from ProQuest (Hospital Premium Collection) - NHS Version

Available at Implementation science: IS - from BioMed Central

**Abstract:** BACKGROUND New clinical research findings may require clinicians to change their behaviour to provide high-quality care to people with type 2 diabetes, likely requiring them to change multiple different clinical behaviours. The present study builds on findings from a UKwide study of theory-based behavioural and organisational factors associated with prescribing, advising, and examining consistent with high-quality diabetes care. AIM To develop and evaluate the effectiveness and cost of an intervention to improve multiple behaviours in clinicians involved in delivering high-quality care for type 2 diabetes. DESIGN/METHODS We will conduct a two-armed cluster randomised controlled trial in 44 general practices in the North East of England to evaluate a theory-based behaviour change intervention. We will target improvement in six underperformed clinical behaviours highlighted in quality standards for type 2 diabetes: prescribing for hypertension; prescribing for glycaemic control; providing physical activity advice; providing nutrition advice; providing on-going education; and ensuring that feet have been examined. The primary outcome will be the proportion of patients appropriately prescribed and examined (using anonymised computer records), and advised (using anonymous patient surveys) at 12 months. We will use behaviour change techniques targeting motivational, volitional, and impulsive factors that we have previously demonstrated to be predictive of multiple health professional behaviours involved in high-quality type 2 diabetes care. We will also investigate whether the intervention was delivered as designed (fidelity) by coding audiotaped workshops and interventionist delivery reports, and operated as hypothesised (process evaluation) by analysing responses to theory-based postal questionnaires. In addition, we will conduct post-trial qualitative interviews with practice teams to further inform the process evaluation, and a post-trial economic analysis to estimate the costs of the intervention and cost of service use. DISCUSSIONConsistent with UK Medical Research Council guidance and building on previous development research, this pragmatic cluster randomised trial will evaluate the effectiveness of a theory-based complex intervention focusing on changing multiple clinical behaviours to improve quality of diabetes care. TRIAL REGISTRATIONISRCTN66498413.

Database: Medline

A community based primary prevention programme for type 2 diabetes integrating identification and lifestyle intervention for prevention: the Let's Prevent Diabetes cluster randomised controlled trial.

**Author(s):** Davies, Melanie J; Gray, Laura J; Troughton, Jacqui; Gray, Alastair; Tuomilehto, Jaakko; Farooqi, Azhar; Khunti, Kamlesh; Yates, Thomas; Let's Prevent Diabetes Team **Source:** Preventive medicine; Mar 2016; vol. 84; p. 48-56 **Publication Date:** Mar 2016 **Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Journal Article **PubMedID:** 26740346

Available at Preventive Medicine - from Unpaywall

**Abstract:** OBJECTIVES Prevention of type 2 diabetes (T2DM) is a priority in healthcare, but there is a lack of evidence investigating how to effectively translate prevention research into a UK primary care setting. We assessed whether a structured education programme targeting lifestyle and behaviour change was effective at preventing progression to T2DM in people with pre-diabetes. MATERIALS AND METHODS Forty-four general practices were randomised to receive either standard care or a 6hour group structured education programme with an annual refresher course, and regular phone contact. Participants were followed up for 3years. The primary outcome was progression to T2DM.RESULTSEight hundred and eighty participants were included (36% female, mean age 64years, 16% ethnic minority group); 131 participants developed T2DM. There was a non-significant 26% reduced risk of developing T2DM in the intervention arm compared to standard care (HR 0.74, 95% CI 0.48, 1.14, p=0.18). The reduction in T2DM risk when excluding those who did not attend the initial education session was also non-significant (HR 0.65, 0.41, 1.03, p=0.07). There were statistically significant improvements in HbA1c (-0.06, -0.11, -0.01), LDL cholesterol (-0.08, -0.15, -0.01), sedentary time (-26.29, -45.26, -7.32) and step count (498.15, 162.10, 834.20) when data were analysed across all time points. CONCLUSIONS This study suggests that a relatively low resource, pragmatic diabetes prevention programme resulted in modest benefits to biomedical, lifestyle and psychosocial outcomes, however the reduction to the risk of T2DM did not reach significance. The findings have important implications for future research and primary care. Database: Medline

Clinical impact of lifestyle interventions for the prevention of diabetes : an overview of systematic reviews.

Author(s): Howells, Lara; Musaddaq, Besma; McKay, Ailsa J.; Majeed, Azeem Source: BMJ Open: 2016; vol. 6 (no. 12) Publication Date: 2016

**Abstract:** OBJECTIVES: To review the clinical outcomes of combined diet and physical activity interventions for populations at high risk of type 2 diabetes. DESIGN: Overview of systematic reviews (search dates April-December 2015). SETTING: Any level of care; no geographical restriction. PARTICIPANTS: Adults at high risk of diabetes (as per measures of glycaemia, risk assessment or presence of risk factors). INTERVENTIONS: Combined diet and physical activity interventions including >= two interactions with a healthcare professional, and >= twelve months follow-up. OUTCOME MEASURES: Primary: glycaemia, diabetes incidence. Secondary: behaviour change, measures of adiposity, vascular disease and mortality. RESULTS: 19 recent reviews were identified for inclusion; five with AMSTAR scores < eight. Most considered only randomised controlled trials (RCTs), and RCTs were the major data source in the remainder. Five trials were included in most reviews. Almost all analyses reported that interventions were associated with net reductions in diabetes incidence, measures of glycaemia and adiposity, at follow-up durations of up to 23 years (typically < six). Small effect sizes and potentially transient effect were reported in some studies, and some reviewers noted that durability of intervention impact was potentially sensitive to duration of intervention and adherence to behaviour change. Behaviour change, vascular disease and mortality outcome data were infrequently reported, and evidence of the impact of intervention on these outcomes was minimal. Evidence for age effect was mixed, and sex and ethnicity effect were little considered. CONCLUSIONS: Relatively long-duration lifestyle interventions can limit or delay progression to diabetes under trial conditions. However, outcomes from more time-limited interventions, and those applied in

routine clinical settings, appear more variable, in keeping with the findings of recent pragmatic trials. There is little evidence of intervention impact on vascular outcomes or mortality end points in any context. 'Real-world' implementation of lifestyle interventions for diabetes prevention may be expected to lead to modest outcomes. [Abstract]

#### Children and families

The Healthy Lifestyles Programme (HeLP)--an overview of and recommendations arising from the conceptualisation and development of an innovative approach to promoting healthy lifestyles for children and their families.

Author(s): Lloyd, Jenny; Wyatt, Katrina Source: International journal of environmental research and public health; Jan 2015; vol. 12 (no. 1); p. 1003-1019 Publication Date: Jan 2015 Publication Type(s): Research Support, Non-u.s. Gov't Journal Article PubMedID: 25608589 Available at International journal of environmental research and public health - from ProQuest (Hospital Premium Collection) - NHS Version

Available at International journal of environmental research and public health - from Europe PubMed Central - Open Access

Abstract: Despite the rise in childhood obesity, there remains a paucity of evidence for effective interventions that engage children and parents sufficiently to make and sustain lifestyle behaviour change. The Healthy Lifestyles Programme (HeLP) is a school-located obesity prevention programme, which has been developed with teachers, families and healthcare professionals. The underpinning assumption in the development of HeLP was to take a relational approach to changing behaviour, building relationships with the schools, children and their families to create supportive environments for healthy lifestyle choices. Thus, HeLP was conceptualised as a complex intervention within a complex system and developed as a dynamic, evolving set of processes to support and motivate children towards healthy behaviours. The delivery methods used are highly interactive and encourage identification with and ownership of the healthy lifestyle messages so that the children are motivated to take them home to their parents and effect change within the family. We have good evidence that HeLP engages schools and children such that they want to participate in the Programme. Results from an exploratory trial showed that the Programme is feasible and acceptable and has the potential to change behaviours and affect weight status. This paper presents an overview of and recommendations arising from the conceptualization; development and evaluation of the Healthy Lifestyles Programme as part of a special issue focusing on novel approaches to the global problem of childhood obesity.

Database: Medline

Family-based childhood obesity interventions in the UK: a systematic review of published studies.

Author(s): Upton, Penney; Taylor, Charlotte; Erol, Rosie; Upton, Dominic

**Source:** Community practitioner: the journal of the Community Practitioners' & Health Visitors' Association; May 2014; vol. 87 (no. 5); p. 25-29 **Publication Date:** May 2014 **Publication Type(s):** Journal Article Review **PubMedID:** 24881194

Available at Community practitioner: the journal of the Community Practitioners' & Health Visitors' Association - from ProQuest (Hospital Premium Collection) - NHS Version

**Abstract:** Family-based programmes that emphasise lifestyle and behaviour change using psychological principles have been shown to be effective in targeting childhood obesity. While

there is some evidence that evaluates UK family-based obesity interventions at a local level, no review to date has addressed this nationally. This review presents the available evidence from UK family-based childhood obesity interventions. Ten articles that met the inclusion criteria were included for review. The majority of programmes reviewed lasted 12 weeks, with only three studies providing follow-up data at 12 months or longer. Change in adiposity may be a short-term benefit of participation in a child weight management programme, but there is insufficient robust evidence to indicate that this benefit is long lasting and many studies were methodologically weak with limited internal validity. There is insufficient evidence to suggest how the inclusion of parents and the wider family may impact on the effectiveness of UK community based weight management programme for children and young people. **Database:** Medline

#### Determinants of Three-Year Change in Children's Objectively Measured Sedentary Time.

Author(s): Atkin, Andrew J; Foley, Louise; Corder, Kirsten; Ekelund, Ulf; van Sluijs, Esther M F Source: PloS one; 2016; vol. 11 (no. 12); p. e0167826 Publication Date: 2016 Publication

Type(s): Journal Article PubMedID: 27942036

Available at PLOS ONE - from Public Library of Science (PLoS)

Available at PLOS ONE - from Unpaywall

Abstract: BACKGROUND Sedentary behaviours (SB) are highly prevalent in young people and may be adversely associated with physical and mental health. Understanding of the modifiable determinants of SB is necessary to inform the design of behaviour change interventions but much of the existing research is cross-sectional and focussed upon screen-based behaviours. PURPOSE To examine the social, psychological and environmental determinants of change in children's objectively measured sedentary time from age 11 to 14 years. METHODS Data are from the second (2008) and third (2011) waves of assessment in the Sport, Physical Activity, and Eating Behaviour: Environmental Determinants in Young People (SPEEDY) study, conducted in the county of Norfolk, United Kingdom, Longitudinal data on accelerometer assessed sedentary time were available for 316 (53.5% female, 11.2±0.3 years at baseline) and 264 children after-school and at the weekend respectively. Information on 14 candidate determinants, including school travel mode and electronic media ownership, was self-reported. Change in the proportion of registered time spent sedentary was used as the outcome variable in cross-classified linear regression models, adjusted for age, sex, body mass index and baseline sedentary time. Simple and multiple models were run and interactions with sex explored. RESULTS Daily sedentary time increased by 30-40 minutes after-school and at the weekend from baseline to follow-up. Participants who travelled to school by cycle exhibited smaller increases in after-school sedentary time (beta; 95%CI for change in % time spent sedentary: -3.3;-6.7,-0.07). No significant determinants of change in weekend sedentary time were identified. CONCLUSIONS Time spent sedentary increased during the three-year duration of follow-up but few of the variables examined were significantly associated with changes in sedentary time. Children's mode of school travel may influence changes in their sedentary time over this period and should be examined further, alongside broader efforts to identify modifiable determinants of SB during childhood. Database: Medline

### Intervention fidelity in a school-based diet and physical activity intervention in the UK: Active for Life Year 5.

**Author(s):** Campbell, Rona; Rawlins, Emma; Wells, Sian; Kipping, Ruth R; Chittleborough, Catherine R; Peters, Tim J; Lawlor, Debbie A; Jago, Russell **Source:** The international journal of behavioral nutrition and physical activity; Nov 2015; vol. 12; p. 141 **Publication Date:** Nov 2015 **Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Journal Article

PubMedID: 26559131

Available at The international journal of behavioral nutrition and physical activity - from ProQuest (Hospital Premium Collection) - NHS Version

Available at The international journal of behavioral nutrition and physical activity - from Unpaywall

Abstract: BACKGROUND Active for Life Year 5 (AFLY5) is an educational programme for Year 5 children (aged 9-10) designed to increase children's physical activity, decrease sedentary behaviour and increase fruit and vegetable intake. This paper reports findings from a process evaluation embedded within a randomised controlled trial evaluating the programme's effectiveness. It considers the fidelity of implementation of AFLY5 with a focus on three research questions: 1. To what extent was the intervention delivered as planned? 2. In what ways, if any, did the teachers amend the programme? and 3. What were the reasons for any amendments? METHODS Mixed methods were used including data collection via observation of the intervention delivery, questionnaire, teacher's intervention delivery log and semistructured interviews with teachers and parents. Qualitative data were analysed thematically and quantitative data were summarised using descriptive statistics. RESULTS Following training, 42 of the 43 intervention school teachers/teaching staff (98%) were confident they could deliver the nutrition and physical activity lessons according to plan. The mean number of lessons taught was 12.3 (s.d. 3.7), equating to 77% of the intervention. Reach was high with 95% of children in intervention schools receiving lessons. A mean of 6.2 (s.d. 2.6) out of 10 homeworks were delivered. Median lesson preparation time was 10 min (IQR 10-20) and 28% of lessons were reported as having been amended. Qualitative findings revealed that those who amended the lessons did so to differentiate for student ability, update them for use with new technologies and to enhance teacher and student engagement. Teachers endorsed the aims of the intervention, but some were frustrated with having to adapt the lesson materials. Teachers also a reported tendency to delegate the physical activity lessons to other staff not trained in the intervention. CONCLUSIONS Fidelity of intervention implementation was good but teachers' enthusiasm for the AFLY5 programme was mixed despite them believing that the messages behind the lessons were important. This may have meant that the intervention messages were not delivered as anticipated and explain why the intervention was found not to be effective. TRIAL REGISTRATIONISRCTN50133740. Database: Medline

### Health for Life in Primary Schools Program, United Kingdom: a Program Impact Pathways (PIP) analysis.

Author(s): Passmore, Sandra; Donovan, Martin Source: Food and nutrition bulletin; Sep 2014; vol. 35 (no. 3) Publication Date: Sep 2014 Publication Type(s): Research Support, Non-u.s. Gov't Journal Article PubMedID: 25902586

Abstract: BACKGROUND The Health for Life in Primary Schools Program helps schools promote healthy, active lifestyles through curriculum support related to healthy eating and cooking, growing food, physical activity, and family involvement. These interrelated strands are shown to have the greatest impact on healthy lifestyles, and the Health for Life in Primary Schools Program seeks to make these not one-off lessons, but a sustainable part of a school's culture. Each school involved with the program develops its own Action Plan in order to achieve program goals. Each school is assessed by an audit of facilities, skills, and curriculum at baseline and follow-up, and the pupils complete an on-line questionnaire at baseline and follow-up. Other impact measures are individual to the school and relate to its own Action Plan. METHOD Health for Life in Primary Schools sought to assess the cohesiveness and strength of the program using the Program Impact Pathways (PIP) model. The program was deconstructed to its individual parts, with each part assessed in terms of its contribution to the overall program and constraints upon its effectiveness. RESULTS The PIP analysis helped clarify the logic and

structure of the program, whether its objectives can be achieved, the Critical Quality Control Points (CCPs), and the impact measures required to demonstrate success. The core indicators identified for impact evaluation were knowledge, attitudes, and behaviors of pupils around healthy eating cooking, growing food, and physical activity. CONCLUSION The PIP model confirmed that the Health for Life in Primary Schools Program is well structured and is well suited to achieve its goals. The findings were presented at the Healthy Lifestyles Program Evaluation Workshop held in Granada, Spain, 13-14 September 2013, under the auspices of the Mondelēz International Foundation. **Database:** Medline

### Community-based pilot intervention to tackle childhood obesity: a whole-system approach.

**Author(s):** Vamos, E P; Lewis, E; Junghans, C; Hrobonova, E; Dunsford, E; Millett, C **Source:** Public health; Nov 2016; vol. 140; p. 109-118 **Publication Date:** Nov 2016 **Publication Type(s):** Journal Article **PubMedID:** 27567069

Available at Public Health - from Unpaywall

Abstract: OBJECTIVES Go-Golborne is a pilot intervention to prevent childhood obesity in the Royal Borough of Kensington and Chelsea between 2014 and 2018. It is a multistrategy approach targeting children aged 0-16 years and their families in all settings where children live, learn and play. This paper describes the methodology and the practical steps in the development of Go-Golborne. STUDY DESIGN The programme uses a quasi-experimental design for the evaluation of changes in weight status using data from the extended National Child Measurement Programme across local schools. For specific behavioural change objectives, baseline self-reported lifestyle measures will be compared against annual follow-up data over the 3-year study period. Qualitative methods will be used to explore the perceptions of stakeholders and participants and organizational change. METHODS Go-Golborne aims to mobilize everyone in the community who has a role or interest in shaping the local environment, norms and behaviours across a range of sectors. A community network of local organizations has been established to codesign all programme activities. The Steering Group of Council officers support programme implementation and environmental changes. The programme has identified six specific behaviour change objectives representing the key areas of need in Golborne and all activities in the council and the community target these objectives during specific programme phases. Key components include community capacity building, communitywide social marketing, environment and policy change and evaluation. RESULTS (PROGRESS)The programme is currently at the beginning of its implementation phase with activities in the community and council targeting the first behaviour change objective. CONCLUSIONS The pilot aims to test the effectiveness of this approach to support behaviour change and prevent unhealthy weight gain in children using multiple strategies. This programme will inform the development of an intervention model that defines essential programme components, accountability of partner organizations delivering obesity prevention programmes and the effective use of existing assets. Database: Medline

### Process evaluation results of a cluster randomised controlled childhood obesity prevention trial: the WAVES study.

**Author(s):** Griffin, T L; Clarke, J L; Lancashire, E R; Pallan, M J; Adab, P; WAVES study trial investigators **Source:** BMC public health; Aug 2017; vol. 17 (no. 1); p. 681 **Publication Date:** Aug 2017 **Publication Type(s):** Research Support, Non-u.s. Gov't Randomized Controlled Trial Journal Article **PubMedID:** 28851329

Available at BMC public health - from ProQuest (Hospital Premium Collection) - NHS Version Available at BMC public health - from Unpaywall

**Abstract:** BACKGROUND Increasing prevalence of childhood obesity and its related consequences emphasises the importance of developing and evaluating interventions aimed at prevention. The importance of process evaluation in health intervention research is increasingly recognised, assessing implementation and participant response, and how these may relate to intervention success or failure. A comprehensive process evaluation was designed and undertaken for the West Midlands ActiVe lifestyle and healthy Eating in School children (WAVES) study that tested the effectiveness of an obesity prevention programme for children aged 6-7 years, delivered in 24 UK schools. The four intervention components were: additional daily school-time physical activity (PA); cooking workshops for children and parents; Villa Vitality (VV), a 6-week healthy lifestyle promotion programme run by a local football club; and signposting to local PA opportunities. METHODS Data relating to six dimensions (Fidelity, Reach, Recruitment, Quality, Participant Responsiveness, Context) were collected via questionnaires, logbooks, direct observations, focus groups and interviews. Multiple data collection methods allowed for data triangulation and validation of methods, comparing research observations with teacher records. The 6-stage WAVES study model ((i) Data collection, (ii) Collation, (iii) Tabulation, (iv) Score allocation and discussion, (v) Consultation, (vi) Final score allocation) was developed to guide the collection, assimilation and analysis of process evaluation data. Two researchers independently allocated school scores on a 5-point Likert scale for each process evaluation dimension. Researchers then discussed school score allocations and reached a consensus. Schools were ranked by total score, and grouped to reflect low, medium or high intervention implementation. RESULTS The intervention was predominantly well-implemented and well-received by teachers, parents and children. The PA component was identified as the most challenging, VV the least. Median implementation score across schools was 56/75 (IQR, 51.0 - 60.8). Agreement between teacher logbooks and researcher observations was generally high, the main discrepancies occurred in session duration reporting where in some cases teachers' estimations tended to be higher than researchers'. CONCLUSIONS The WAVES study model provides a rigorous and replicable approach to undertaking and analysing a multi-component process evaluation. Challenges to implementing school-based obesity prevention interventions have been identified which can be used to inform future trials. TRIAL REGISTRATIONISRCTN97000586. 19 May 2010.

**Database:** Medline

### Parental response to a letter reporting child overweight measured as part of a routine national programme in England : results from interviews with parents.

**Author(s):** Nnyanzi, Lawrence A.; Summerbell, Carolyn D.; Shucksmith, Janet; Ells, Louisa **Source:** BMC Public Health; 2016; vol. 17 (no. 846) **Publication Date:** 2016

Abstract: BACKGROUND: Rising rates of childhood obesity have become a pressing issue in public health, threatening both the mental and physical well-being of children. Attempts to address this problem are multifaceted, and in England include the National Child Measurement Programme (NCMP) which assesses weight status in English primary school children in reception class (aged 4-5) and in year 6 (aged 10-11), with results being sent out to parents. However the effectiveness and impact of this routine parental feedback has yet to be fully understood. This paper reports one component of a mixed methods study undertaken in North East England, examining the impact of the feedback letters on parents' understanding and feelings about their child's weight status and whether or not this seemed likely to lead to behaviour change. METHODS: One-to-one semi-structured interviews (n=16) were conducted with a sample of parents/guardians after they had received their child's weight results letter. Eight parents/guardians were sub-sampled from the group whose child had been indicated to be overweight or obese and eight were from the group whose child had been indicated to be of ideal weight status. Interviews were conducted until data saturation was reached for both groups. RESULTS: The reactions of parents/guardians whose children were identified as being

overweight followed a sequence of behaviours ranging from shock, disgust with the programme, through denial and self-blame to acceptance, worry and intention to seek help. On the other hand, the reaction of parents/guardians whose children were identified as being ideal weight ranged from relief, pleasure and happiness through affirmation and self-congratulation to 'othering'. CONCLUSIONS: Whilst overweight and obesity is often portrayed as a medical condition, parents/guardians see it as deeply rooted in their social lives and not in health terms. Parents believe that the causes of overeating and lack of exercise relate closely to the obesogenic environment, particularly the complex social and cultural milieu and time pressures within which this sample of people live. Associating this problem in feedback letters with dangerous diseases like cancer, and advising parents to visit GPs to resolve child weight issues was perceived as inappropriate by the parents, and caused controversy and anger. Given the likelihood that the NCMP will continue as a monitoring device, it is evident that the management of the process needs to be reviewed, with particular attention being paid to the feedback process. Local health authorities will need to manage parental expectations and ensure linkage with appropriately commissioned remedial weight management interventions. [Abstract] Database: HMIC

#### **Health Checks**

Be SMART: examining the experience of implementing the NHS Health Check in UK primary care.

**Author(s):** Shaw, Rachel L; Pattison, Helen M; Holland, Carol; Cooke, Richard **Source:** BMC family practice; Jan 2015; vol. 16; p. 1 **Publication Date:** Jan 2015 **Publication Type(s):** Journal Article **PubMedID:** 25608667

Available at BMC family practice - from ProQuest (Hospital Premium Collection) - NHS Version Available at BMC family practice - from Unpaywall

**Abstract:** BACKGROUND The NHS Health Check was designed by UK Department of Health to address increased prevalence of cardiovascular disease by identifying risk levels and facilitating behaviour change. It constituted biomedical testing, personalised advice and lifestyle support. The objective of the study was to explore Health Care Professionals' (HCPs) and patients' experiences of delivering and receiving the NHS Health Check in an inner-city region of England. METHODS Patients and HCPs in primary care were interviewed using semistructured schedules. Data were analysed using Thematic Analysis. RESULTS Four themes were identified. Firstly, Health Check as a test of 'roadworthiness' for people. The roadworthiness metaphor resonated with some patients but it signified a passive stance toward illness. Some patients described the check as useful in the theme. Health check as revelatory. HCPs found visual aids demonstrating levels of salt/fat/sugar in everyday foods and a 'traffic light' tape measure helpful in communicating such 'revelations' with patients. Being SMART and following the protocolrevealed that few HCPs used SMART goals and few patients spoke of them. HCPs require training to understand their rationale compared with traditional advicegiving. The need for further follow-up revealed disparity in follow-ups and patients were not systematically monitored over time. CONCLUSIONSHCPs' training needs to include the use and evidence of the effectiveness of SMART goals in changing health behaviours. The significance of fidelity to protocol needs to be communicated to HCPs and commissioners to ensure consistency. Monitoring and measurement of follow-up, e.g., tracking of referrals, need to be resourced to provide evidence of the success of the NHS Health Check in terms of healthier lifestyles and reduced CVD risk. Database: Medline

### **Specific populations - BME**

Barriers and Facilitators to Healthy Lifestyle Changes in Minority Ethnic Populations in the UK: a Narrative Review.

**Author(s):** Patel, Naina; Ferrer, Harriet Batista; Tyrer, Freya; Wray, Paula; Farooqi, Azhar; Davies, Melanie J; Khunti, Kamlesh **Source:** Journal of racial and ethnic health disparities; Dec 2017; vol. 4 (no. 6); p. 1107-1119 **Publication Date:** Dec 2017 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article Review **PubMedID:** 27928772

Available at Journal of racial and ethnic health disparities - from Unpaywall

**Abstract:** Minority ethnic populations experience a disproportionate burden of health inequalities compared with the rest of the population, including an increased risk of type 2 diabetes (T2DM). The purpose of this narrative review was to explore knowledge and attitudes around diabetes, physical activity and diet and identify barriers and facilitators to healthy lifestyle changes in minority ethnic populations in the UK. The narrative review focused on three key research topics in relation to barriers and facilitators to healthy lifestyle changes in minority adult ethnic populations: (i) knowledge and attitudes about diabetes risk; (ii) current behaviours and knowledge about physical activity and diet; and (iii) barriers and facilitators to living a healthier lifestyle. Nearly all of the studies that we identified reported on South Asian minority ethnic populations; we found very few studies on other minority ethnic populations. Among South Asian communities, there was generally a good understanding of diabetes and its associated risk factors. However, knowledge about the levels of physical activity required to gain health benefits was relatively poor and eating patterns varied. Barriers to healthy lifestyle changes identified included language barriers, prioritising work over physical activity to provide for the family, cultural barriers with regard to serving and eating traditional food, different perceptions of a healthy body weight and fear of racial harassment or abuse when exercising. Additional barriers for South Asian women included expectations to remain in the home, fear for personal safety, lack of same gender venues and concerns over the acceptability of wearing 'western' exercise clothing. Facilitators included concern that weight gain might compromise family/carer responsibilities, desire to be healthy, T2DM diagnosis and exercise classes held in 'safe' environments such as places of worship. Our findings suggest that South Asian communities are less likely to engage in physical activity than White populations and highlight the need for health promotion strategies to engage people in these communities. There is a gap in knowledge with regard to diabetes, physical activity, diet and barriers to healthy lifestyle changes among other ethnic minority populations in the UK; we recommend further research in this area. Database: Medline

### **Obesity/ weight management**

Gaining pounds by losing pounds: preferences for lifestyle interventions to reduce obesity.

**Author(s):** Ryan, Mandy; Yi, Deokhee; Avenell, Alison; Douglas, Flora; Aucott, Lorna; van Teijlingen, Edwin; Vale, Luke **Source:** Health economics, policy, and law; Apr 2015; vol. 10 (no. 2); p. 161-182 **Publication Date:** Apr 2015 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article **PubMedID:** 25348049

Available at Health economics, policy, and law - from ProQuest (Hospital Premium Collection) - NHS Version

**Abstract:** While there is evidence that weight-loss interventions reduce morbidity, indications of their acceptability are limited. Understanding preferences for lifestyle interventions will help policymakers design interventions. We used a discrete choice experiment to investigate

preferences for lifestyle interventions to reduce adult obesity. Attributes focused on: the components of the programme; weight change; short-term and longer-term health gains; time spent on the intervention and financial costs incurred. Data were collected through a web-based questionnaire, with 504 UK adults responding. Despite evidence that dietary interventions are the most effective way to lose weight, respondents preferred lifestyle interventions involving physical activity. While the evidence suggests that behaviour change support improves effectiveness of interventions, its value to participants was limited. A general preference to maintain current lifestyles, together with the sensitivity of take up to financial costs, suggests financial incentives could be used to help maximise uptake of healthy lifestyle interventions. An important target group for change, men, required more compensation to take up healthier lifestyles. Those of normal weight, who will increase in weight over time if they do not change their lifestyle, required the highest compensation. Policymakers face challenges in inducing people to change their behaviour and adopt healthy lifestyles. **Database:** Medline

Access to weight reduction interventions for overweight and obese patients in UK primary care: population-based cohort study.

Author(s): Booth, Helen P; Prevost, A Toby; Gulliford, Martin C Source: BMJ open; Jan 2015; vol. 5 (no. 1); p. e006642 Publication Date: Jan 2015 Publication Type(s): Research Support, Non-u.s. Gov't Journal Article PubMedID: 25586371

Available at BMJ open - from BMJ Journals - Open Access

Available at BMJ open - from Unpaywall

**Abstract:** OBJECTIVES To investigate access to weight management interventions for overweight and obese patients in primary care. SETTING UK primary care electronic health records. PARTICIPANTS A cohort of 91 413 overweight and obese patients aged 30-100 years was sampled from the Clinical Practice Research Datalink (CPRD). Patients with body mass index (BMI) values ≥25 kg/m(2) recorded between 2005 and 2012 were included. BMI values were categorised using WHO criteria. INTERVENTIONS Interventions for body weight management, including advice, referrals and prescription of antiobesity drugs, were evaluated. PRIMARY AND SECONDARY OUTCOME MEASURES The rate of body weight management interventions and time to intervention were the main outcomes. RESULTS Data were analysed for 91 413 patients, mean age 56 years, including 55 094 (60%) overweight and 36 319 (40%) obese, including 4099 (5%) with morbid obesity. During the study period, 90% of overweight patients had no weight management intervention recorded. Intervention was more frequent among obese patients, but 59% of patients with morbid obesity had no intervention recorded. Rates of intervention increased with BMI category. In morbid obesity, rates of intervention per 1000 patient years were: advice, 60.2 (95% CI 51.8 to 70.4); referral, 75.7 (95% CI 69.5 to 82.6) and antiobesity drugs 89.9 (95% CI 85.0 to 95.2). Weight management interventions were more often accessed by women, older patients, those with comorbidity and those in deprivation. Follow-up of body weight subsequent to interventions was infrequent. CONCLUSIONS Limited evidence of weight management interventions in primary care electronic health records may result from poor recording of advice given, but may indicate a lack of patient access to appropriate body weight management interventions in primary care. Database: Medline

Encouraging bigger-picture thinking in an intervention to target multiple obesogenic health behaviours.

Author(s): Rennie, Laura J; Uskul, Ayse K Source: Appetite; Nov 2017; vol. 118; p. 144-148

Publication Date: Nov 2017 Publication Type(s): Research Support, Non-u.s. Gov't

Randomized Controlled Trial Journal Article PubMedID: 28782571

**Abstract:** Research has shown that use of the third-person perspective to visualise a behaviour results in increased motivation to engage in the behaviour relative to the first-person

perspective. This effect is claimed to operate in part because the third-person perspective leads the individual to "see the bigger picture", linking the visualised behaviour to broader goals and identities. Reasoning that this effect could be harnessed to encourage engaging in multiple behaviours that serve the same broader goal, the present study manipulated the visual perspective participants used to imagine themselves exercising, and assessed effects on cognitions and behaviour related to both exercising and healthy eating. Baseline exercise levels were measured and explored as a moderation effect. As predicted, it was found that for participants who engaged in more exercise at baseline, visualising exercise using the thirdperson perspective resulted in them reporting stronger intentions to exercise and taking more leaflets showing local exercise classes. For those who engaged in less exercise at baseline, there was no effect of perspective. In terms of eating, there was a main effect of perspective, such that participants who imagined themselves exercising using the third-person perspective ate significantly less chocolate than those who used the first-person perspective, irrespective of baseline exercise levels. These results suggest that use of third-person perspective visualisation can be used to encourage engagement in multiple behaviours that serve the same broad goal, which may serve as an intervention technique that will be especially helpful for health outcomes with multiple contributing behaviours, such as obesity and overweight.

Database: Medline

#### Lessons from a peer-led obesity prevention programme in English schools.

**Author(s):** Bell, Sarah L; Audrey, Suzanne; Cooper, Ashley R; Noble, Sian; Campbell, Rona **Source:** Health promotion international; Apr 2017; vol. 32 (no. 2); p. 250-259 **Publication Date:** Apr 2017 **Publication Type(s):** Randomized Controlled Trial Journal Article **PubMedID:** 24711350

Available at Health promotion international - from HighWire - Free Full Text Available at Health promotion international - from Unpaywall

Abstract: Obesity in young people is a major public health concern. Energy balance, the interrelationship between diet and physical activity, is known to be a key determinant. Evidence supports the development of school-based approaches to obesity prevention. ASSIST (A Stop Smoking in Schools Trial) is an effective school-based, peer-led smoking prevention programme for 12-13-year-old students, based on diffusion of innovations theory. The AHEAD (Activity and Healthy Eating in ADolescence) study tested the feasibility of adapting ASSIST to an obesity prevention intervention. The AHEAD intervention was tested and refined during a pilot study in one school, followed by an exploratory trial in six schools. Quantitative (self-report behavioural questionnaires and evaluation forms) and qualitative (structured observations, focus groups and interviews) research methods were used to examine the implementation and acceptability of the intervention. The potential effectiveness of the intervention in increasing healthy eating was measured using self-report behavioural questionnaires. Activity monitors (accelerometers) were used to measure physical activity. Results show it was feasible to implement the AHEAD intervention, which was well received. However, implementation was resource and labour intensive and relatively expensive. Furthermore, there was no evidence of promise that the intervention would increase physical activity or healthy eating in adolescents. Although diet and physical activity are both relevant for obesity prevention, the focus on two behaviours appeared too complex for informal diffusion through peer networks. This identifies a tension, particularly for adolescent peer-led health promotion, between the desire not to isolate or oversimplify health behaviours and the need to present clear, succinct health promotion messages. Database: Medline

### 'Five a day'

Fruit and vegetables on prescription: a brief intervention in primary care.

Author(s): Buyuktuncer, Z; Kearney, M; Ryan, C L; Thurston, M; Ellahi, B

**Source:** Journal of human nutrition and dietetics: the official journal of the British Dietetic Association; Apr 2014; vol. 27 **Publication Date:** Apr 2014 **Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article **PubMedID:** 23651065

Available at Journal of human nutrition and dietetics : the official journal of the British Dietetic Association - from Unpaywall

**Abstract:** BACKGROUND Increasing fruit and vegetable consumption is a goal for the U.K. Therefore, the effectiveness of a fruit and vegetable voucher scheme coupled with key 'five-aday' consumption messages as a brief intervention in primary care consultations was assessed in the present study. METHODS One thousand one hundred and eighty-eight vouchers as a prescription for fruits and vegetables were routinely distributed to patients attending a primary healthcare centre in a deprived area, and 124 volunteer patients routinely attending the centre were included. Telephone-based questionnaires were used to examine changes in consumption over the short and medium term. Other key aspects assessed in the evaluation related to fruit and vegetable purchasing behaviour, knowledge relating to what constitutes a portion size, the relationship between food and health, and barriers to consumption. RESULTS Although 76.2% of participants used the prescription vouchers when purchasing fruits and vegetables, a significant change in the consumption or purchasing behaviour was not observed (P > 0.05). Participants' level of knowledge relating to the number of portions recommended and the portion size of different fruits and vegetables showed a moderate increase from baseline over the short and medium term. The primary barriers to fruit and vegetable consumption were reported as 'the quality of fresh fruits and vegetables' and 'the money available to spend on food'. CONCLUSIONS The use of 'the fruit and vegetable on prescription' scheme was an effective method of engaging participants in improving awareness of key diet-related health messages. However, further intervention is required to produce a significant impact on the actual behaviour change. Database: Medline

### Consumption of a High Quantity and a Wide Variety of Vegetables Are Predicted by Different Food Choice Motives in Older Adults from France, Italy and the UK.

**Author(s):** Appleton, Katherine M; Dinnella, Caterina; Spinelli, Sara; Morizet, David; Saulais, Laure; Hemingway, Ann; Monteleone, Erminio; Depezay, Laurence; Perez-Cueto, Frederico J A; Hartwell, Heather **Source:** Nutrients; Aug 2017; vol. 9 (no. 9) **Publication Date:** Aug 2017 **Publication Type(s):** Comparative Study Multicenter Study Journal Article **PubMedID:** 28832549

Available at Nutrients - from Europe PubMed Central - Open Access

Available at Nutrients - from Unpaywall

**Abstract:** BACKGROUND Consumption of a high quantity and wide variety of vegetables is currently recommended for health. Dietary variety can be low, however, particularly for older adults. This study investigated the affective factors associated with the quantity and variety of vegetables consumed by older adults in France, Italy and the UK. METHODS Adults aged 65 years plus completed questionnaires on self-reported vegetable intake (quantity and variety), liking for vegetables, attitudes towards intake, and demographic variables. RESULTS In 497 older adults (France, n = 187, Italy, n = 152, UK, n = 158), higher quantities of vegetables consumed were associated with a higher age, affluence score and liking for vegetables, and a lower importance in consumption of familiarity (smallest  $\beta$  = 0.11, p = 0.03). Greater variety was

associated with a higher liking and importance of health benefits, and a lower importance of familiarity (smallest  $\beta$  = -0.11, p < 0.01). Higher quantity and variety combined (quantity x variety) was associated with a higher age, liking and importance of health benefits, and a lower importance of familiarity (smallest  $\beta$  = 0.14, p = 0.02). Country-specific effects were also found (smallest  $\beta$  = 0.20, p < 0.01). CONCLUSIONS These findings demonstrate a role for liking and a lower concern for eating familiar foods in vegetable consumption, and a particular role for concern for health benefits in the consumption of a greater variety of vegetables. **Database:** Medline

#### **Alcohol**

Using a mobile health application to reduce alcohol consumption: a mixed-methods evaluation of the drinkaware track & calculate units application.

Author(s): Attwood, Sophie; Parke, Hannah; Larsen, John; Morton, Katie L Source: BMC public health; May 2017; vol. 17 (no. 1); p. 394 Publication Date: May 2017

Publication Type(s): Research Support, Non-u.s. Gov't Comparative Study Journal Article

PubMedID: 28511698

Available at BMC public health - from ProQuest (Hospital Premium Collection) - NHS Version Available at BMC public health - from Unpaywall

Abstract: BACKGROUND Smartphone applications ("apps") offer promise as tools to help people monitor and reduce their alcohol consumption. To date, few evaluations of alcohol reduction apps exist, with even fewer considering apps already available to the public. The aim of this study was to evaluate an existing publically available app, designed by Drinkaware, a UK-based alcohol awareness charity. METHODS We adopted a mixed-methods design, analysing routinely collected app usage data to explore user characteristics and patterns of usage. Following this, in-depth interviews were conducted with a sub-sample of app users to examine perceptions of acceptability, usability and perceived effectiveness, as well as to provide recommendations on how to improve the app. RESULTS One hundred nineteen thousand seven hundred thirteen people downloaded and entered data into the app over a 13month period. High attrition was observed after 1 week. Users who engaged with the app tended to be "high risk" drinkers and to report being motivated "to reduce drinking" at the point of first download. In those who consistently engaged with the app over time, self-reported alcohol consumption levels reduced, with most change occurring in the first week of usage. Our qualitative findings indicate satisfaction with the usability of the app, but mixed feedback was given regarding individual features. Users expressed conflicting views concerning the type of feedback and notifications that the app currently provides. A common preference was expressed for more personalised content. CONCLUSIONS The Drinkaware app is a useful tool to support behaviour change in individuals who are already motivated and committed to reducing their alcohol consumption. The Drinkaware app would benefit from greater personalisation and tailoring to promote longer term use. This evaluation provides insight into the usability and acceptability of various app features and contains a number of recommendations for improving user satisfaction and the potential effectiveness of apps designed to encourage reductions in alcohol consumption. Database: Medline

A randomized controlled trial of a brief online intervention to reduce alcohol consumption in new university students: Combining self-affirmation, theory of planned behaviour messages, and implementation intentions.

**Author(s):** Norman, Paul; Cameron, David; Epton, Tracy; Webb, Thomas L; Harris, Peter R; Millings, Abigail; Sheeran, Paschal **Source:** British journal of health psychology; Feb 2018; vol. 23 (no. 1); p. 108-127 **Publication Date:** Feb 2018 **Publication Type(s):** Randomized Controlled Trial Journal Article

PubMedID: 28941040

Available at British journal of health psychology - from Unpaywall

Abstract: OBJECTIVES Excessive alcohol consumption increases when students enter university. This study tests whether combining (1) messages that target key beliefs from the theory of planned behaviour (TPB) that underlie binge drinking, (2) a self-affirmation manipulation to reduce defensive processing, and (3) implementation intentions (if-then plans to avoid binge drinking) reduces alcohol consumption in the first 6 months at university. DESIGN A 2 (self-affirmation) × 2 (TPB messages) × 2 (implementation intention) between-participants randomized controlled trial with 6-month follow-up. METHODS Before starting university. students (N = 2,951) completed measures of alcohol consumption and were randomly assigned to condition in a full-factorial design. TPB cognitions about binge drinking were assessed immediately post-intervention (n = 2,682). Alcohol consumption was assessed after 1 week (n = 1,885), 1 month (n = 1,389), and 6 months (n = 892) at university. TPB cognitions were assessed again at 1 and 6 months. RESULTS Participants who received the TPB messages had significantly less favourable cognitions about binge drinking (except perceived control), consumed fewer units of alcohol, engaged in binge drinking less frequently, and had less harmful patterns of alcohol consumption during their first 6 months at university. The other main effects were non-significant. CONCLUSIONS The findings support the use of TPB-based interventions to reduce students' alcohol consumption, but question the use of self-affirmation and implementation intentions before starting university when the messages may not represent a threat to self-identity and when students may have limited knowledge and experience of the pressures to drink alcohol at university. Statement of contribution What is already known on this subject? Alcohol consumption increases when young people enter university. Significant life transitions represent potential teachable moments to change behaviour. Interventions with a strong theoretical basis have been found to be more effective. What does this study add? A brief online intervention delivered to students before they start university can reduce alcohol consumption. The theory of planned behaviour can be used to inform the design of interventions to change health behaviour.

**Database:** Medline

### Organisational/ occupational heath

Advising on lifestyle can improve nurses' health.

Author(s): Bickerstaffe, Gary; Williams, Denise Source: Nursing times; 2014; vol. 110 (no. 51); p. 17-19 Publication Date: 2014 Publication Type(s): Journal Article PubMedID: 26012068 Available at Nursing times - from ProQuest (Hospital Premium Collection) - NHS Version

**Abstract:** Many nurses are trained in brief health promotion interventions to ensure patients' lifestyles are assessed in relation to their overall health. Staff evaluations of health promotion training provided at Bolton Foundation Trust showed how it may prompt nurses to evaluate their own lifestyles. It could benefit healthcare organisations, as it may mean staff are supported to be healthier, happier and more productive. **Database:** Medline

An evaluation of the health and wellbeing needs of employees: An organizational case study.

**Author(s):** Chetty, Laran **Source:** Journal of occupational health; Jan 2017; vol. 59 (no. 1); p. 88-90

Publication Date: Jan 2017 Publication Type(s): Journal Article Evaluation Studies

**PubMedID:** 27853056

Available at Journal of Occupational Health - from Europe PubMed Central - Open Access Available at Journal of Occupational Health - from Unpaywall

Abstract: INTRODUCTION Workplace health and wellbeing is a major public health issue for employers. Wellbeing health initiatives are known to be cost-effective, especially when the programs are targeted and matched to the health problems of the specific population. The aim of this paper is to gather information about the health and wellbeing needs and resources of employees at one British organization. SUBJECTS AND METHODSA cross-sectional survey was carried out to explore the health and wellbeing needs and resources of employees at one British organization. All employees were invited to participate in the survey, and, therefore, sampling was not necessary. RESULTS838 questionnaires were viable and included in the analysis. Employees reported "feeling happier at work" was the most important factor promoting their health and wellbeing. Physical tasks, such as "moving and handling" were reported to affect employee health and wellbeing the most. The "provision of physiotherapy" was the most useful resource at work. In all, 75% felt that maintaining a healthy lifestyle in the workplace is achievable. CONCLUSIONS More needs to be done by organizations and occupational health to improve the working conditions and organizational culture so that employees feel that they can function at their optimal and not perceive the workplace as a contributor to ill-health.

Database: Medline

#### The case for linking employee wellbeing and productivity.

**Author(s):** Hancock, Christine; Cooper, Katy **Source:** Occupational Health; Nov 2017; vol. 69 (no. 11); p. 14-15 **Publication Date:** Nov 2017 **Publication Type(s):** Academic Journal

**Abstract:** The article focuses on link between employee wellbeing and productivity in Great Britain. Topics discussed include impact of employee health and wellbeing on sickness absence and presenteeism, impact of tackling risk factors such as smoking, physical activity and obesity, and insufficiency of education for sustained behavior change. **Database:** HBE

### Sheffield Hallam Staff Wellness Service : four-year follow-up of the impact on health indicators.

**Author(s):** Flint, Stuart W.; Scalfe, Robert; Kesterton, Sue; Humphreys, Liam; Copeland, Robert; Crank, Helen; Breckon, Jeff; Maynard, Ian; Carter, Anoushka **Source:** Perspectives in Public Health; 2016 (no. 5); p. 295-301 **Publication Date:** 2016

Abstract: AIMS: Alongside the increasing prevalence of chronic health conditions such as cardiovascular disease and diabetes, has been an increase in interventions to reverse these ill-health trends. The aim of this study was to examine the longitudinal impact of the Sheffield Hallam University Staff Wellness Service on health indicators over a five year period.

METHODS: The Sheffield Hallam Staff Wellness Service was advertised to university employees. Of 2561 employees who have attended the service, 427 respondents (male = 162, female = 265) aged 49.86 +/- 12.26 years attended for five years (four years follow up). Each year, participants were assessed on a range of health measures (i.e. cardio-respiratory fitness, body mass index, blood pressure, total cholesterol, high density lipoproteins, lung function and percentage body fat). Participants also received lifestyle advice (based on motivational interviewing) as part of the intervention to either improve, or in some cases maintain, their

current health behaviours (e.g. increased physical activity and diet change). RESULTS: The wellness service improved staff health for those with an 'at risk' health profile from baseline. These improvements were maintained in subsequent follow-up assessments. Improvement from baseline to year one follow up was observed for all health indicators as was the maintenance of this improvement in years two, three and four. CONCLUSIONS: The service demonstrates that a university-based wellness service using a combination of motivational interviewing and health screening to elicit behaviour change (and subsequent improvements in health-related outcomes) was successful in improving the health of employees with an 'at risk' profile. [Abstract] **Database:** HMIC

### **Appendix**

### **Sources and Databases Searched**

Medline, Health Business Elite, HMIC (Health Management Information Consortium), CINAHL, British Nursing Index

### **Search Strategy**

Stra #	ategy 565874 Database	Search term	Results
1	Medline	"LIFE STYLE"/	52849
2	Medline	"HEALTH BEHAVIOR"/	45633
3	Medline	("behavio*r change" OR "healthy lifestyle" OR "large scale training" OR	16257
4	Medline	"large-scale training").ti,ab (1 OR 2 OR 3)	103026
5	Medline	"EVALUATION STUDIES AS TOPIC", OR "HEALTH CARE EVALUATION	/ 121172
6	Medline	MECHANISMS"/ "PATIENT OUTCOME ASSESSMENT"/	3899
7	Medline	"PATIENT OUTCOME ASSESSMENT"/ OR "OUTCOME AND PROCESS ASSESSMENT	29331
8	Medline	(HEALTH CARE)"/ (effective* OR outcome* OR impact OR benefit*).ti,ab	3906554
9	Medline	(5 OR 6 OR 7 OR 8)	4020227
10	Medline	(4 AND 9)	35780
11	Medline	"UNITED KINGDOM"/	218350
12	Medline	(10 AND 11)	738
13	Medline	12 [DT 2014-2018]	256
14	Medline	12	738
15	HBE	("behavio*r change" OR "healthy lifestyle" OR "large scale training" OR	868
16	HBE	"large-scale training").ti,ab (effective* OR outcome* OR impact OR benefit*).ti,ab	355003

17	HBE	(15 AND 16)	309
18	HBE	17 [DT 2014-2018]	90
19	HMIC	("behavio*r change" OR "healthy lifestyle" OR "large scale training" OR	775
20	HMIC	"large-scale training").ti,ab (effective* OR outcome* OR impact OR benefit*).ti,ab	80823
21	HMIC	(19 AND 20)	458
22	HMIC	21 [DT 2014-2018]	82
23	CINAHL	("behavio*r change" OR "healthy lifestyle" OR "large scale training" OR	9392
24	CINAHL	"large-scale training").ti,ab (effective* OR outcome* OR impact OR benefit*).ti,ab	1039916
25	CINAHL	(23 AND 24)	5139
26	CINAHL	25 [DT 2014-2018]	2808
27	CINAHL	"UNITED KINGDOM"/	187415
28	CINAHL	(25 AND 27)	108
29	BNI	("behavio*r change" OR "healthy lifestyle" OR "large scale training" OR	2196
30	BNI	"large-scale training").ti,ab (effective* OR outcome* OR impact OR benefit*).ti,ab	175480
31	BNI	(29 AND 30)	1092
32	BNI	31 [DT 2014-2018]	583

### Help accessing articles or papers

Where a report/ journal article or resource is available online, the link or PDF has been provided. Many links will require an NHS Athens password. If you do not have an OpenAthens account you can <u>self-register here</u>. Where an open access link (no password needed) is available, these have been included. Examples include 'Unpaywall', BioMed Central and PubMed central.

If you need help accessing an article, or have any other questions, contact the Knowledge Management team. You can contact the team on KnowledgeManagement@hee.nhs.uk