



## **TECHNICAL** REPORT

# Transferability of health promotion and health education approaches between communicable and non-communicable diseases

Analysis of current evidence

**ECDC TECHNICAL REPORT**

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## Abbreviations

AIDS	Acquired immunodeficiency syndrome
APHA	American Public Health Association
CDC	Centers for Disease Control and Prevention
CPHA	Canadian Public Health Association
EC	European Commission
EUPHA	European Public Health Association
HIV	Human immunodeficiency virus
HPV	Human papilloma virus
IUHPE	International Union for Health Promotion and Education
NGO	Non-governmental organisation
NIH	(US) National Institutes of Health
OECD	Organisation for Economic Co-operation and Development
PHAA	Public Health Association of Australia
PRECEDE–PROCEED	Predisposing, Reinforcing and Enabling Constructs in Educational Diagnosis and Evaluation — Policy, Regulatory, and Organizational Constructs in Educational and Environmental Development
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
SOPHE	Society for Public Health Education
TB	Tuberculosis
UN	United Nations
UNICEF	United Nations Children's Fund
WHO	World Health Organization

## Executive summary

This review examined the approaches to the prevention of chronic diseases (also referred to as non-communicable diseases) that have been developed and used in health education and health promotion. It considered how these approaches have been applied to the prevention of communicable diseases. The study assumed that many of the causal factors considered for the prevention of diseases and the efforts required to change them apply to both non-communicable diseases and communicable diseases. Details are presented on applicable health education and health promotion models for prevention that are extant. Possible modification of these models for application in the sphere of infectious diseases is considered.

The main approach taken was a review of the literature and the provision of a relevant synthesis of the knowledge base that has accumulated to date. In addition, grey literature was considered as well: websites, unpublished literature, analysis of programmes that included a more holistic approach to promoting health rather than being just disease-focused.

Based on this, a knowledge synthesis translation and exchange perspective was developed with the intention of providing advice on how the health promotion approaches to non-communicable disease prevention could be taken up in the area of communicable diseases. The document ends with four conclusions: 1) apply the socio-ecological mode as an overarching theory of change in designing disease prevention programmes; 2) expand beyond a focus on individual behaviour change for disease prevention to a wider emphasis on social norms and social change; 3) apply an equity lens in developing interventions that tackle communicable diseases and 4) increase community ownership of disease prevention activities.

# Introduction

Communicable disease control is challenging and further knowledge is needed to identify what underpins the practice of disease prevention. Public health interventions should aim to provide an enabling environment for adopting healthier behaviour at individual, community and societal levels, both in the area of lifestyle changes and preventive measures, contributing to non-communicable disease and communicable disease prevention.

Health communication is an integral part of the effective public health response to the continuing threat posed by communicable diseases in the European Union (EU) and European Economic Area (EEA) Member States. It is also one of ECDC's key responsibilities, as mentioned in its Founding Regulation (Regulation EC 851/2004).

ECDC commissioned a mapping of the current use and application of health communication activities in the EU/EEA.<sup>\*</sup> This project concluded that health communication for the prevention and control of communicable diseases is still underdeveloped in EU and EEA countries. There is a body of evidence emerging in health communication, mainly from the non-communicable diseases area, which offers an opportunity for identifying areas of transferability between non-communicable and communicable diseases. ECDC also commissioned an analysis publication, according to which health communication competencies may be defined as a combination of the essential knowledge, abilities, skills and values necessary for the practice of health communication. It is clear that the complexities and the multidisciplinary nature of health communication involve a vast range of skills drawing from a number of disciplines including health, education, public health, health promotion, social marketing and information technology.

From these disciplines, health promotion in particular is well recognised as contributing to consistent progress in areas of non-communicable disease prevention (e.g. anti-smoking campaigns). Examples from communicable disease areas where health promotion works well are very limited and mainly related to HIV/AIDS. While not all health promotion actions are within ECDC's mandate, developing personal disease prevention skills through behaviour change and providing data and evidence for policy-making and practice can and should be addressed. In this context health education is also recognised as making a consistent contribution to improving knowledge and behaviour related to healthy lifestyles.

There is, however, very limited evidence on how health promotion and health education contribute to communicable disease prevention and how the gap between the two areas - non-communicable and communicable diseases - can be bridged. In the current economic climate, it is imperative that more innovative, simpler and less expensive solutions are identified, including through synergies and exchange of good practices from other areas, that can be transferred and adapted for communicable disease prevention. ECDC therefore considered that the time was right for an analysis of current evidence.

The aim of the evidence analysis was to assess the contribution of health promotion theories and methods in communicable disease prevention across Europe (not necessarily limited to the EU Member States and EEA/EFTA countries).

The specific objectives of the evidence analysis were: a) to investigate how health promotion and health education models, approaches and theories are used in the area of communicable diseases and b) to discuss options for transferring health promotion and health communication experience from the area of non-communicable to communicable diseases.

## Rationale and background information

One compelling reason for this research is the apparent lack of information sharing across 'silos of work' within the public health fields. Many of the productive and competent professionals in the public health fields dealing with communicable diseases are unaware of the programmes and approaches taken by their colleagues in non-communicable diseases and vice versa. This is an on-going problem that needs to be addressed in order to produce more efficient approaches to the prevention and control of diseases in general.

It is important to note at the outset that the separation of diseases into infectious and chronic is often misleading. These historic classifications were mainly based on disease aetiology and a biomedical classification. In reality, many diseases with infectious aetiology lead to chronic disease conditions or chronicity; many so-called chronic diseases have infectious origins. Thus it is a false dichotomy for many conditions and this classification has often led to approaches in dealing with the diseases that may be too restrictive and do not take into account the many benefits of a broader conceptualisation. Perhaps one of the best current examples is HIV/AIDS, which has a viral origin but becomes a chronic condition and produces in its course many potential non-communicable diseases in any individual

<sup>\*</sup> Sixsmith J, Doyle P, D'Eath M, Barry MM. Health communication and its role in the prevention and control of communicable diseases in Europe - Current evidence, practice and future developments. Stockholm: ECDC; 2014.

patient. In addition, sociocultural factors play a major role in the course of disease, regardless of whether the disease is infectious or non-communicable. Thus a major goal of research in this area is to consider how the lessons learned from a health promotion approach to non-communicable diseases may be applied to communicable diseases.

In the prevention of communicable diseases the basic approach usually focuses on awareness (modes of transmission), change in attitude, change in behaviour and then on communication for behaviour change. Historically health education, in dealing with non-communicable diseases, took a similar approach at the individual level. Over time the concepts of health promotion have taken a broader view that focuses on community level and/or social-cultural changes. Communication for social change, one area of focus for health promotion, takes into account social factors as social norms and the unequal distribution of social determinants of health. A recent ECDC technical report entitled 'Systematic literature review to examine the evidence for the effectiveness of interventions that use theories and models of behaviour change: towards the prevention and control of communicable diseases' [1] has served as a background reference to the current study, which has a more specific remit to consider non-communicable disease approaches applicable to communicable diseases from a health promotion perspective. This report is in many ways complementary, without duplicating the study, either in approach or scope.

In this study, classical approaches to health promotion are reviewed, with notable attention to such major efforts as the Framingham Heart Study (USA) and the North Karelia Project (Finland). These highly-regarded and well-documented studies show how community mobilisation and education in a variety of sectors led to better results in chronic disease outcomes (notably cardiovascular disease). This was in part attributable to an ecological approach (e.g. based on evaluation of a densely-interconnected social network of thousands of people). These studies reveal the complexity of the approach but also the utility.

This review considers what binds non-communicable diseases and communicable diseases together and how they may differ. Although the investigators worked where the literature was extensive and well-developed, the situation was different for the so-called grey literature.

The literature relevant to this study is limited by the lack of a comparative literature considering both infectious and non-communicable disease outcomes; the limitations of the European context as a base and the limitations of unpublished or grey literature relevant to this study. In many cases, the study was guided by the work of governmental agencies engaged in systematic reviews of literature related to health promotion interventions. Such larger systematic and long-term efforts have informed the work of this study.

## Study design and methodology

The underlying thesis of this study is that the research and application of the health promotion-based interventions to prevent and control non-communicable diseases are relevant for application to communicable diseases. To assess this thesis a broad search of the academic literature was undertaken using the USA Community Guide, MEDLINE, EMBASE, Web of Science, CENTRAL, ERIC, Cochrane Library, and Centre for Reviews and Dissemination databases, considering peer-reviewed studies published mainly in English, Spanish and French, between January 1990 and July 2013. In addition, the project considered the theoretical health promotion literature that is relevant to the thesis. Also included are health promotion interventions that are not carried out by medical professionals but are conducted in non-medical settings and in the community. The grey literature was examined to the extent possible.

These efforts were assisted by an advisory committee who provided feedback on the progress of the study and offered advice on new areas to consider.

## Inclusion and exclusion criteria

The potential relevant list of publications is very large and therefore some simple guidelines were established for useful inclusion and exclusion criteria. These were based, in part, on a review of the classical approaches for systematic reviews as developed by PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses, <http://www.prisma-statement.org/index.htm>), the Cochrane Collaboration and other established systematic and meta-analysis guidelines. The purpose is not to duplicate these guidelines but to develop the minimum elements appropriate for this study. Whereas these more traditional approaches to systematic reviews are generally framed around scientific rigour, scientific design and outcome, it was felt that with this particular remit the focus should be on studies already available in the systematic literature that could be adapted or transferred to address communicable diseases. This required a consideration of the similarities between non-communicable diseases and communicable diseases. Such similarities could relate to causes as well as to long- and short-term outcomes. The emphasis is on health promotion models, studies and findings common to communicable and non-communicable diseases that are related to modifiable behavioural risk factors; modifiable socio-cultural factors; settings approaches; community approaches and health promoting principles. Although an important dimension of health promotion, this study does not attempt to focus on policy and governance.



## Approach

The underlying approach in this study is one of evaluation and therefore focuses on and summarises evidence that documents the outcomes (i.e. impact/effect) of health promotion interventions.\* However, the multidisciplinary nature of health promotion has led to the evolution of many alternative views on evaluation. As a result there is no single methodology that is appropriate for this study; rather, there are several well-developed approaches that are useful. With regard to health promotion evaluation there have been many evaluation efforts to produce evidence for health promotion: Cochrane (approach from evidence-based medicine—the systematic review); the USA-based Centers for Disease Control (CDC) Community Preventive Services Task Force's 'Community Guide'; the UK-based National Institute for Health and Care Excellence; the International Union for Health Promotion and Education (IUHPE)'s Europe/Canada/USA efforts and the IUHPE Global Programme on Health Promotion Effectiveness, among others. A general finding is that in approaching community-based health promoting interventions, no two interventions are identical. The solution is to combine information on similar interventions to represent an intervention construct, enhance external validity and identify common aspects. This presents a challenge to the use of a strong methodological approach in that many studies do not meet the rigorous methodological criteria established by the review group and, as a result, many areas yield a finding of insufficient evidence. This is particularly relevant when reviewing community-based interventions. This insufficient evidence finding is to a great extent an artefact of the study criteria which are not suited to complex interventions. As a result, there is a growing belief that interventions for which evidence is insufficient should be more thoroughly and properly evaluated. The question is whether the evidence is poor or the evidence-seeking behaviour and model are inappropriate. This is critical to understanding the nature and usefulness of health promotion interventions in disease prevention.

In recent years an improved understanding of interventions in health promotion has arisen from earlier institutional efforts. It is now widely recognised that interventions are both complex and highly dependent on the context in which they take place. Moreover, while causality is very difficult to measure, logic models can be useful for explaining complex relationships. Finally, in health promotion approaches a concern with the broader issue of values, particularly as related to equity, is paramount.

In addition, health promotion interventions that are relevant to non-communicable diseases and communicable diseases can be found in:

- health literacy as an approach to understanding health, health conditions, problems, risks and in order to change behaviour;
- Participatory Action Research (PAR), a hallmark area of much health education intervention research (multiple models are considered in terms of communicable disease approaches);
- community interventions, as mentioned in the CDC-based Community Guide, and other empowerment models;
- approaches to individual behaviour and social change;
- ecological models of intervention and the diffusion of innovations; and
- evaluation with an emphasis on effectiveness and evidence.

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\* The approach of evaluation in health promotion has been discussed in many sources, however a basic strategy was specified clearly in the WHO publication: Principles and perspectives (Rootman I, Goodstadt M, Hyndman B, McQueen D, Potvin L, Springett J, Ziglio E. (eds.) Evaluation in Health Promotion: Principles and Perspectives, WHO Regional Publications, European Series, No. 92. 2001). The chapter by Potvin, Haddad and Frohlich, pp.45-62, sets out a comprehensive approach for evaluation in health promotion. The emphasis is on outcome evaluation (whether a programme produces the change intended) and process evaluation (analysing programmes as they are implemented).

# Results

## Classic approaches: the Framingham Heart Study and the North Karelia Project

Two highly-regarded, classic approaches to health promotion from the history of non-communicable disease prevention are the Framingham Heart Study (USA) and the North Karelia Project (Finland). These well-documented studies show how community mobilisation and education across sectors lead to improved chronic disease outcomes (notably cardiovascular disease), in part attributable to an ecological approach. These studies reveal the utility and the complexity of such an approach for any disease. Both of these large and influential studies have involved years of research and application, with the cooperation of hundreds of public health scientists, and have resulted in thousands of publications that have influenced the field of health promotion practice.

### Framingham Heart Study

Since the early days of the study nearly 2 000 investigators have published some 2 500 research articles on the Framingham Heart Study data in peer-reviewed medical journals; around 900 were published in the period 2000–2009 and around 400 since then. The publications are characterised by multiple authorship, often with over 100 collaborators involved on a single article. Thus the Framingham work has yielded a vast collection of results by cooperating researchers on topics derived from a very extensive and long-term community study on cardiovascular diseases and its causes. Although many of the studies are very clinical and disease-specific, they are embedded in a community and population approach. Cardiovascular disease was chosen as a disease focus for this study primarily because it was the leading cause of death and serious illness in the United States. The National Institutes of Health (NIH) established the study in 1948 in conjunction with Boston University. It was organised as a long-term study of some 5 000 healthy residents in the town of Framingham, Massachusetts between the ages of 30 and 62 years. The purpose was to study risk factors for cardiovascular disease in this population. Over the years numerous physical examinations and personal interviews were carried out, with participants returning to the study for assessment every two years and in 1971 a second generation was added to the project. By 2002, a third generation of participants, the grandchildren of the original cohort, had been added.

Such a concerted long-term study has yielded many useful results and, in addition to the well-known clinical risk factors such as HDL cholesterol, blood pressure, diabetes, etc., it has articulated the social, contextual and behavioural factors involved in causing cardiovascular diseases. In brief, the broad aetiology of cardiovascular disease has been greatly enhanced and has, over the years, become integrated into the practice of medicine and public health and led to the development of effective preventive and health promotion approaches.

As mentioned, the study has produced an extensive amount of literature. Several historical reviews have been written over the last six decades [2–10]. In particular, it revealed the need to look at a broader socio-ecological and behavioural causality if meaningful prevention and health promotion strategies were to be applied. The main theory behind this approach was that understanding this causality would yield the best prevention approaches. The review of classical prevention approaches, such as that of John Snow, with interventions at the structural level, served as a guide. Embedded within this theoretical approach was idea of multi-causality, a primary feature of health promotion today. A second major theoretical feature was the use of a mixed community setting and population approach by choosing a single town to follow over time. The rationale was explicit and well developed; the methodology and research design were complex.

### North Karelia Project

The North Karelia Project presents another setting and a Europe-based community approach to addressing the socio-ecological complexity of causality in cardiovascular disease [11–16]. There are important similarities and differences to the US approach in the Framingham study. The similarities are chiefly the focus on cardiovascular diseases, socio-ecological risk factors and a multilevel population approach. The differences are mainly in size, scope and duration. However, it is important to note that North Karelia was seen as far less clinical and much more as a community-based effort to address the very high rates of cardiovascular disease in Finland. It was started in 1972, but soon became broader based, with ideas and perspectives arising from health promotion and disease prevention strategies promulgated in the World Health Organization's European Region. In addition the North Karelia Project was seen as a demonstration project that could be scaled up to the whole county. This notion has become a key approach to modern day prevention and health promotion. Another essential component in North Karelia was the idea of being community-based with the participation of the community, as opposed to the community just being the subject of the research as in the Framingham model. In addition the study focused on interventions using multiple approaches, including marketing, use of primary care physicians, and environmental and policy approaches. In short, the strategy was significantly more within the realm of a health promotion project. The widely accepted conclusion is that the North Karelia Project demonstrated both the utility and effectiveness of community-based projects with a non-clinical orientation.

However, despite the widespread citations and acceptance of both the Framingham Study and the North Karelia Project, they have not been free of constructive criticisms over the years [17,18]. In essence they serve as excellent models of a large-scale, more clinically-oriented approach to disease prevention and health promotion. The underlying theoretical and methodological approaches perhaps foreshadowed present day prevention and health promotion strategies for intervention, but clinical restrictions prevented them from providing the complete community and participatory approach that characterises present-day intervention strategies.

## Present day models from health promotion, prevention and health education

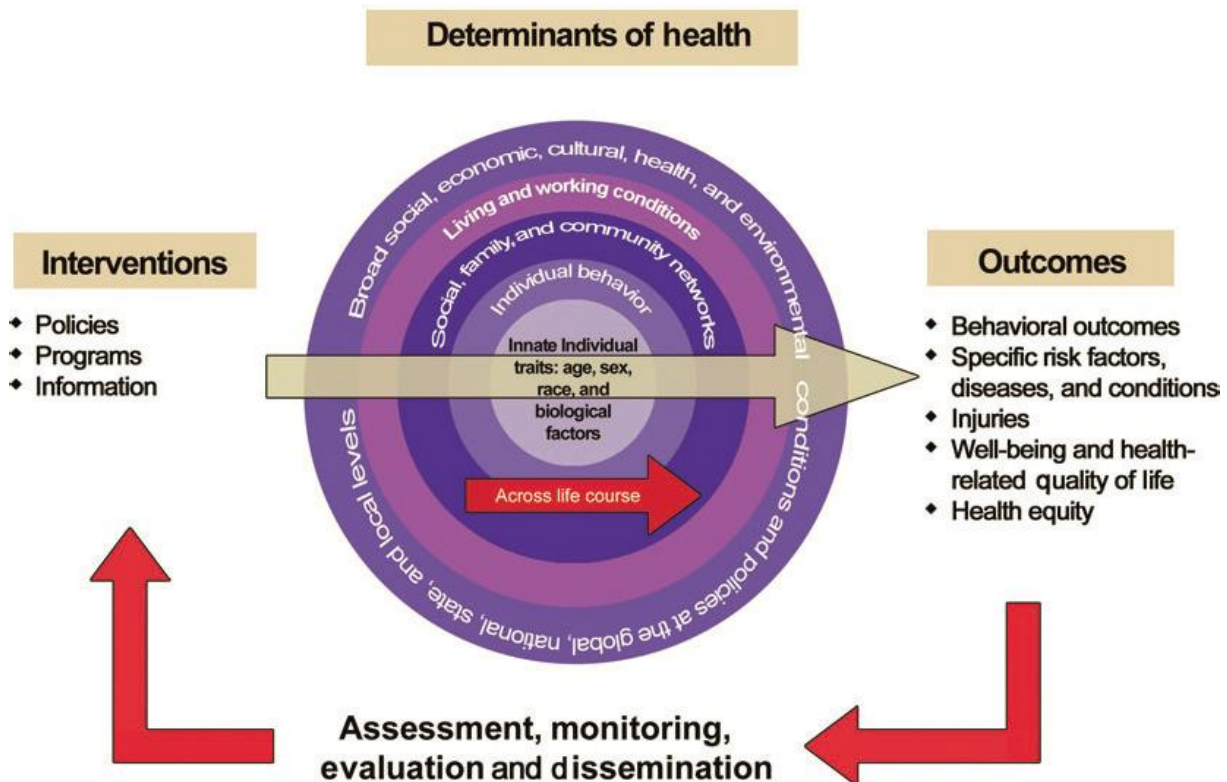
This subsection reviews and considers the principal models of health promotion and education used in everyday practice to change behaviour that leads to non-communicable diseases. Most of the major approaches stem from an initial model or theory. The overall approaches are summarised in the book 'Health Behavior and Health Education: Theory, Research and Practice' by Glanz, Rimer and Viswanath, Eds.[19]. This work summarises the main models and their underlying theories, including the theory of reasoned action, the transtheoretical model and stages of change, behavioural environmental models, social network models, stress and coping models, community models of behavioural change, the diffusion of innovations, theories of organisational change, communication theory and media models, community intervention models, ecological models, and social marketing. A second and critical basic text is Green and Kreuter's 'Health Program Planning: An Educational and Ecological Approach' [20] available in four editions published over the past two decades and developing the PRECEDE-PROCEED model widely used by health educators. The strengths and weaknesses of these models, as applicable to communicable disease prevention, are discussed below. Numerous examples are given of how these models can be applied in the area of HIV as representative of a crossover use from non-communicable diseases to communicable diseases in behavioural prevention strategy.

### Socio-ecological model approaches

The origin of the socio-ecological approach or model is unclear. As early as the mid-twentieth century epidemiologists and behavioural scientists were discussing behavioural risk factors, sociocultural risk factors, and environmental factors in complicated disease outcomes [21]. Over the next half century and into the present time such models and approaches have become ubiquitous, particularly in public health literature on diseases with complicated aetiologies, outcomes or high comorbidity. In general, all these approaches, whether in the elaborate models found in WHO reports and documents on the social determinants of health, or on the US CDC's dedicated web page\* contain many of the same elements. The primary aspect of these models is that they consider reciprocal causal relationships involving behavioural, social and environmental factors that are highly interrelated and function in a socially structured context. Essentially it is all about context, a word that has become synonymous with current health promotion theory. This means that any intervention undertaken that would lead to improved health or disease prevention, must, as far as possible, take a contextual approach. This approach is fundamental to the socio-ecological intervention strategy in public health (Figure 1).

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\* <http://www.cdc.gov/violenceprevention/overview/social-ecologicalmodel.html>

**Figure 1. Determinants of health, interventions and outcomes**

Source: National Research Council and Institute of Medicine. *US Health in International Perspective: Shorter Lives, Poorer Health. Panel on Understanding Cross-National Health Differences Among High-Income Countries.* SH Woolf and L Aron (eds.) Committee on Population, Division of Behavioral and Social Sciences and Education, and Board on Population Health and Public Health Practice, Institute of Medicine. Washington, DC: The National Academies Press. 2013.

The socio-ecological approach is not without its criticisms. Although the model is appropriate for describing all the potential causal factors operating in relation to any particular health or disease outcome, simple description is not the most useful mechanism for building interventions. The models tend to be static, whereas the components are in fact very dynamic. Introducing any intervention into this complexity presents several challenges. First, in most interventions one would like to be able to manipulate the variables of interest in order to change outcomes. Second, such complex modelling requires an equally complex understanding of evaluation, often the evaluation of variables that stem from many discordant disciplines. Third, the use of multilevel interventions assumes that the multilevel knowledge base is sound or at least reasonably developed. Fourth, and perhaps most challenging, is that public health professionals often lack training and/or skills in the disciplines represented in multi-level models. Thus, while socio-ecological models have an innate appeal in dealing with the complexities of effecting change in non-communicable disease and communicable disease outcomes, their complexity rules them out as a panacea.

Despite the increased call for intervention strategies in health promotion to take a socio-ecological approach, a general review of the intervention literature finds that such approaches are not so common and indeed many interventions remain focused on only one or two of the multilevel aspects of such an approach. This was a key finding in an extensive review of twenty years of this approach in a leading American health promotion journal [22]. This finding reinforces the view that such high-level modelling may be very useful for describing and understanding the relationship between contextual factors and health, but its usefulness for intervention strategies remains a subject for further exploration [23]. Nonetheless, such multilevel modelling may help identify the factors explaining the most variance in any causal model [24–31]. Literature on health promotion for non-communicable diseases has focused on the socio-ecological model. This may also be helpful in understanding the complexities associated with communicable diseases in their social context. The selected literature cited here offers support for this concept.

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## Health promotion and health communication strategies addressing individual behaviour used for both communicable and non-communicable diseases

There are many health promotion interventions addressing individual behavioural factors that relate to both communicable diseases and non-communicable diseases. Historically many of these interventions related to behavioural risk factors such as smoking, physical activity, diet and substance abuse. The use of a health promotion lens to summarise this area has been recently well reviewed in several chapters of McQueen's 'Global Handbook on Non-communicable Diseases and Health Promotion' [21]. In the majority of applications this approach has been linked to non-communicable disease, notably heart disease and stroke, diabetes, cancer, arthritis and other non-communicable diseases, many of which have infectious components. There are many examples in this area of work and multiple and extensive reviews.

Lessons learnt from past interventions also indicate the importance of addressing individual behavioural factors within a community setting. One of the few comprehensive reviews on this kind of intervention in non-communicable disease prevention has been conducted by the Canadian National Collaborating Centre for Methods and Tools: 'Community-based interventions for enhancing access to or consumption of fruit and vegetables among five to 18-year olds: a scoping review' [32]. This review identified literature evaluating the effects of community-based interventions designed to increase fruit and vegetable access and/or consumption among five to eighteen-year olds. Schools were the most common location for interventions, which were typically multi-faceted, targeted at individuals below fifteen years of age and delivered by teachers or other school personnel. They concluded future research should examine interventions to increase access to fruits and vegetables and their impact on health. This has particular relevance to low-income communities found in urban centres and cities throughout Europe. They also argued that additional research on implementing interventions in low- and middle-income countries is warranted based on the limited literature focusing on those populations, suggesting that future research should examine interventions to increase access to fruit and vegetables.

A second review by Pomerleau et al. for The American Society for Nutritional Sciences [33] centred on interventions designed to increase adult fruit and vegetable intake. This project systematically reviewed evidence on the effectiveness of interventions and programmes to promote fruit and/or vegetable intake in adults. Notably, consistent positive effects were seen in studies involving educational counselling. However, interventions using telephone contacts or computer-tailored information also appeared to be a reasonable alternative. Community-based multicomponent interventions also had positive findings. This literature review suggests that small increases in fruit and vegetable intake are possible in population subgroups, and that these can be achieved by a variety of approaches.

Similar examples of systematic reviews relating to individual behaviour are examined extensively in the CDC Community Guide and in other review organisations, such as the Cochrane Collaboration and the UK NICE efforts. Although the attention is generally focused on those behavioural interventions that relate to non-communicable diseases, most of the approaches would transfer readily to communicable disease prevention. Of particular relevance are the area of physical activity and ecological approaches to improving physical activity, leading to better health outcomes and potential reduction of risk for communicable diseases. This potentially useful literature is quite large. In particular, many systematic reviews and studies indicate that there is strong support for interventions that address modified physical education, individualised behavioural change, non-family social support, enhanced access and community-wide education. Under the leadership of Dolores Albarraccin at the University of Pennsylvania Social Action Lab there have been a series of meta-analyses related to social cognitive influences on behavioural patterns. This abundant spectrum of work, much of which is published, looks at applications in health promotion as applied to interventions to prevent HIV. An example of one useful finding in this work is 'that the less power a population has (ethnic minority, women, and impoverished groups), the more important skills and actual resource provision become' [34]. For example, African-American audiences need to be taught self-management skills (how to manage moods, drugs, planning) and also need help obtaining condoms. These things are not as important for a European-American population, which enjoys more power and resources. The relative deprivation of various populations across the European region presents a potential for exploring the same approaches.

With regard to health communication strategies there is a great deal of literature coming from the highly developed area of social marketing. This area has an extensive history of development in health education, health promotion and disease prevention. Health communication and social marketing share a common aspect of traditional health education – dealing with changes in knowledge, attitudes and practices. This is also linked to behavioural modification. Those working in social marketing or health communication create and use products, programmes or interventions to promote health in individuals. There is a strong parallel with work on consumer research in the public sector. One example of this approach in disease prevention and control and health promotion is the US CDC product entitled 'CDCynergy Lite'.\* CDCynergy Lite

\* <http://www.cdc.gov/healthcommunication/cdcynergy/cdcynergylite.htm>

is an updated version of the original social marketing edition of CDCynergy, a process model for developing a communications strategy to help solve a public health problem. The model guides the reader through the available research to help describe and determine the causes of the health problem to be addressed. It also attempts to define the audience segments affected by the problem. A range of possible strategies are then offered, systematically selecting the best ones. In brief, it is an approach to developing a comprehensive communication plan. The model is in the public domain and was developed jointly by CDC and the Academy for Educational Development and the Social Marketing National Excellence Collaborative. Such approaches are very useful for highly-developed countries with strong communications infrastructure. However, the evaluation of the model has been somewhat limited in terms of knowledge, attitudes and practices in public health. For example, effect size (i.e. the amount of change in population behaviour) is often quite small given the costs of funding broad communication programmes. While small effect sizes may be appropriate for commercial products, this is more problematic for changes related to health behaviour. Nevertheless, there are promising results in health communication campaigns with integrated and complex strategies to deliver messages communicated through various channels such as mass media (TV, radio), printed media (brochures, posters), and interpersonal communications. Recently attention has begun to focus on the use of social media such as Facebook, Twitter and other internet capabilities. Review of this area is still on-going. Those areas examined by the CDC Community Guide suggest that health communication strategies which include mass media and product distribution interventions are useful with appropriate population targeting and segmentation\*.

The report 'Health communication and its role in the prevention and control of communicable diseases in Europe' [35], a comprehensive, long-term research project commissioned by ECDC and developed by a consortium of universities, has yielded a wealth of information on health communication approaches and communicable diseases that may be applied to the European context. The primary conclusions largely reflect findings in this study on health promotion applicability to the management and prevention of communicable diseases, based upon analogies to non-communicable disease approaches. The synergies between the conclusions in the two reports (see page 40 for conclusions of this report) are striking, especially with regard to health literacy and health communication approaches. The fact that the similarities occur despite the use of different methodological approaches reinforces the conclusions drawn in this report and the findings of the consortium. This replication of major results further emphasises the importance of the recommendations set out in this study on the type of future research and practice required to enhance approaches to communicable diseases in Europe.

## Relevant materials in other fields

There are numerous books and reports on interventions in fields related to public health and health promotion that provide behavioural and social models of intervention which may be relevant for communicable diseases. The scope of all possible areas that could be included is extremely wide. Firstly, there are numerous materials on single diseases. Secondly, there is a large amount of literature in the areas of medical sociology, medical anthropology, medical psychology and healthcare using models and explanations related to the basic approaches in health promotion. Indeed, much health promotion work is based on writings by professionals trained in these areas and many of the models reflect writings on these themes. An in-depth analysis of all these areas would go far beyond the scope of this study. However, it may be useful to investigate some of these areas in more detail to reflect on their application to communicable diseases. This section provides some examples of bibliographic commentary as to why these areas might be useful.

The extensive work done in the area of sexually-transmitted diseases is well summarised in Aral SO, Douglas JM (eds). (2007). 'Behavioral Interventions for Prevention and Control of STDs' [36]. This publication provides a basic history of health promotion-based interventions applied to the area of sexually-transmitted diseases (STDs). It includes a discussion of the theoretical models used, individual behaviour-based models, structural models, social marketing and community-based approaches. It also provides guidance on best practices stemming from health promotion.

Considerable work has also been done in the area of adolescent pregnancy, covered in an earlier review article in the Journal of Adolescent Health [37]. The extensive coverage of quasi-experimental designs and experimental methods to evaluate adolescent sexual behaviour in health education studies prior to 2000 is particularly useful. Programme effectiveness was found in those studies containing long-term and/or intensive programmes, well-trained facilitators and a focus on specific skills. Another review in this area covering a shorter time period by Lyles et al., 'Best-Evidence Interventions: Findings from a Systematic Review of HIV Behavioral Interventions for US Populations at High Risk, 2000–2004' [38], concluded that there were effective intervention programmes.

Despite the many reviews, there are some characteristics that make it difficult to ascertain whether they provide useful insight and guidance for recommending health promotion interventions for communicable diseases. First is the problem of reduction. Most of these reviews typically start with a list of all relevant articles on the topic and then apply inclusion-exclusion criteria. In general, these criteria are based on an appropriate methodology and

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\* A summary of this evaluation can be found at: <http://thecommunityguide.org/healthcommunication/index.html>

proper scientific analysis being applied in the study. As a result, a large percentage of the initial studies is eliminated. Second, there is often a broad mix of topic focus and/or subjects in the remaining studies. For example, in the area of sexually-transmitted infections (STI) and HIV there is often a mix of subjects such as drug users, men having sex with men, heterosexuals, etc. Since the methodology is not designed to be multi-causal or multi-level but follows a more rigid experimental type, the findings are not easy to compare or aggregate.

Many studies that report on communicable diseases and relevant public health approaches concentrate on less-resourced countries. This is also the case with approaches in the field of health promotion. While non-communicable diseases appear to be a logical subject matter for health promotion strategies in the advanced economies, when it comes to communicable diseases many of those working in public health and health promotion see these diseases primarily as problems of the developing world. That this may be a limited and false viewpoint is not under discussion here. Nonetheless there is some very complete literature on disease control in developing countries that deserves reference in this study.

Perhaps the most comprehensive work in the area of health promotion is that led by Dean Jamison and funded in part by the Bill & Melinda Gates Foundation. It is a joint undertaking by the International Bank for Reconstruction and Development, World Bank, World Health Organization, and the Fogarty International Center of the National Institutes of Health. The result, *Disease Control Priorities in Developing Countries*, 2nd edition [39], provides many insights. The report investigates what progress has been made in defining and reducing the global burden of disease and how much countries have accomplished in developing and providing efficient, effective, and equitable healthcare. Several sections of the document are pertinent to health promotion and communicable diseases and have possible applications in Europe. Chapter 8, *Improving the Health of Populations: Lessons of Experience* is of particular note in that it sets out the strategies used in many countries to address a variety of communicable diseases including diarrhoea, vaccination, maternal health, measles and tuberculosis. It also discusses health improvement for the poor using financial incentives. Many of these studies can be scaled up, which may also make them relevant for developed countries. A second and perhaps more significant finding is that all of the approaches, though often limited to one disease outcome, ultimately recognised the importance of the multilevel perspective characterising health promotion. Finally, in reading through the extensive findings it is clear that many efforts have been hampered by the silo-like approach, focused on a single disease outcome.

Another field relating to the thesis expounded in this review is medical sociology. This is a sub-discipline of sociology that has a long history of research, studies and interventions in medical areas and concerns causal factors in disease and illness. Over the years, the *Handbooks of Medical Sociology* have provided a good overview of growth in the field as regards contextual factors in illness. Of particular note is the fifth edition [40], containing a whole section devoted to the 'social contexts of health and illness.' This section introduced many areas including, causal explanations for social disparities in health, the importance of culture, race, ethnicity and health, political economy of health and the environment. By the latest edition [41] this area had transformed into a clear concern for social contexts and health disparities (pp. 3–146).

A recent, comprehensive text from this field of medical sociology is the *Handbook of the sociology of health, illness and healing*, edited by Bernice Pescosolido [42]. Her chapter 'Organizing the Sociological Landscape for the Next Decades of Health and Health Care Research: The Network Episode Model III-R as Cartographic Subfield Guide' [43] is particularly noteworthy. In this chapter a model approach is set out that is analogous to many of the socio-ecological models discussed, but it includes a molecular level of genes and proteins as well. The network approach and the inclusion of community systems are notable. Moreover, the discussions in the Handbook mirror those in the health promotion field, even though there are some differences in background principles and concepts. This field tends to be slightly more concerned with systems, healthcare, and organizational aspects of health than the health promotion field. Nonetheless it offers valuable insights. Unfortunately the work focuses more on understanding and knowledge building than on intervention.

Finally, the notion of burden of disease provides a critical background to health promotion and non-communicable diseases in relation to infectious diseases. Burden of disease is seen as a particular challenge for public health across the globe. In the mid-1990s, seminal work was published jointly by the World Health Organization, Harvard University and the World Bank. Of particular note was Volume One in a series of ten publications entitled 'The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020' [44]. This work, by Christopher Murray and Alan Lopez, sets out in detail the methodology and critical findings of a large study. Moreover, there have been many other documents as a follow on from this study. The *Lancet* (2012) recently devoted an entire issue to updates which both reinforced the original findings and slightly altered the present view of the burden of non-communicable diseases\*. The downside of this huge literature base is that it is descriptive and provides little insight into interventions, although it does show the vast area for intervention potential. One comprehensive discussion of the contextual factors from the viewpoints of income inequality, equity and social justice is that of Richard Wilkinson and Kate Pickett, entitled 'The Spirit Level: Why More Equal Societies Almost Always Do Better' [45]. This book builds on the extensive influential

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\* <http://www.thelancet.com/themed/global-burden-of-disease>



work of the authors in the UK and addresses the notion of inequity in detail at the societal level, a topic that is gaining increased attention. Another very useful and important publication is a document from 2013 by the National Research Council and Institute of Medicine of the National Academies entitled 'U.S. Health in International Perspective: Shorter Lives, Poorer Health' [46]. This monograph, prepared by a panel of experts, carefully documents the role of contextual factors among the OECD countries. It is a powerful illustration that health and illness are not simply a matter of spending money, but that many other factors play a powerful and convincing role.

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## Literature on health promotion approaches to HIV/AIDS

One disease area that clearly links health promotion approaches relevant to non-communicable diseases with communicable diseases is HIV/AIDS. There is a very large body of literature in this area. This is relevant because HIV is a communicable disease with the characteristics of a chronic disease, particularly in terms of longevity, but also because it is associated with many chronic co-morbidities. In addition, it is a key disease in terms of health promotion concepts because of the sociocultural characteristics associated with people living with HIV/AIDS and the strong behavioural component of transmission. There are also strong parameters related to the social determinants of health, and a significant link to access to and the affordability of essential drugs, particularly in developing countries. Finally, it is not only health promotion principles that are associated with this disease. The methodologies of control and management are strongly related to health promotion approaches, particularly in the areas of community and health-promoting healthcare. Given the large body of literature, this report will only emphasise the work most critical to understanding the thesis.

The area within the literature related to young people has been covered systematically by DiClemente, Salazar and Crosby [47]. They note in their review that many behavioural interventions to reduce sexual risk-taking behaviour in adolescents show strong effects in the short term, but these diminish overtime. They also note that this finding may be the result of a failure to take a broader ecological perspective when assessing the efficacy of interventions. Thus, only interventions that have a multi-causal social perspective will show meaningful results. Their argument: 'understanding the complex web of influences that affects adolescents' STI/HIV-associated risk behaviour is critically important to the design and implementation of risk-reduction interventions and public health and prevention education policy, as well as for informing clinical practice and counselling guidelines' (p. 889). They present a large literature review to support this position.

One example in particular is noteworthy for consideration, that of an applied ecological prevention intervention in Brazil. The Brazilian ecological approach is described in detail by Berkman and colleagues [48]. The approach fits neatly within the more extensive description of the socio-ecological approach detailed elsewhere in this report. It involves a community grassroots approach that is broad-based, engaging the community and decision-makers within it. In the case of AIDS intervention, much effort has been made to remove the stigma of AIDS, a common problem in dealing with this disease. The community effort involved the engagement of NGOs and trade unions, as well as government agencies. In brief, attempts were made to alter fundamental values that were acting as barriers to effective risk reduction interventions. The approach was successful, as measured in increased sales and use of condoms. More importantly, and this is the expectation of a well-designed ecological approach, incidence rates dropped significantly and even mortality rates began to be affected. This is an example of an ecological approach that operates at the broader, macro level. Given the vast amount of literature on health promotion interventions associated with HIV/AIDS, it is noteworthy that the ecological approach continues to show strength as a model for communicable disease prevention and health promotion. Moreover, this type of intervention is also recommended by the CDC Community Guide [49]. CDC also produces a Compendium of Evidence-Based HIV Behavioural Interventions [50].

### References for HIV/AIDS

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## Literature on health literacy in health promotion

Although health literacy is a relatively recent concept in health promotion, an extensive amount of literature has been written on this subject. This literature has recently been reviewed by Sandra Vamos and Irving Rootman [51] in terms of its application to non-communicable disease prevention. There is considerable evidence that health literacy can be effective in improving the management of diseases and can affect disease outcomes. As a concept it has been adopted extensively in Europe [52,53].

Health literacy has a footing in the medical, health and educational sector and draws extensively from each. The medical perspective is mainly clinical; the health promotion perspective, mainly community based and the educational perspective is mainly school-based. Thus it may be seen as a settings approach, applicable to many different types of behaviour relating to either non-communicable or communicable diseases. The medical approach to health literacy is largely focused on patient literacy, disease understanding, medication compliance and other biomedical aspects [54,55]. The health promotion orientation tends to consider health literacy in the context of community development and policy design, although there is a strong emphasis on health education and individual behaviour change [56]. From an educational point of view, health literacy tends to follow the integration of health matters into the school curriculum [57,58]. Further clarification of these distinctions is found in an editorial by Abel [59], and further discussions can be found in many sources [60–62].

The relationship between non-communicable diseases and health literacy is explored in Martin et al. [63]; Canadian Council on Learning [64]; Williams, Baker, Parker, & Nurss [65]; Mancuso & Rincon [66]; Rosenfeld et al. [67]; Schillinger et al. [68]; Johnston Lloyd et al. [69]; Gazmararian, Williams, Peel, & Baker [70]; and Paasche-Orlow, Parker, Gazmararian, Nielsen-Bohlman, & Rudd [71]. Fortunately there have been multiple systematic reviews of health literacy interventions and although most have been related to non-communicable diseases, their findings are clearly applicable to communicable diseases [72–77]. Although the findings of these reviews are quite mixed there are useful specific applications throughout. Perhaps the most important outcome in terms of application to communicable diseases is the general agreement that, in principle, policies at national level are important in addressing the health disparities that exist within geopolitical areas. Clearly, within Europe, IUHPE has taken up health literacy as a priority area [78] and an IUHPE position paper is being prepared on the subject by its Global Working Group. Individual countries within Europe have also initiated major programmes, such as the British ‘Skilled for Life’ programme and the Dutch health literacy activities.

As with all areas of health promotion applied to the prevention of diseases, chronic or infectious, the pattern of work in health literacy has revealed the strengths and weaknesses of the approach. What is clear is that the approach can be effective if appropriately applied. However, there is a need for more research to identify the efficacy of using different target groups or settings. Moreover, research is required on the multidisciplinary aspect of health literacy linking to the idea of ‘health in all policies’. One central organisational research issue is the extent to which the separate institutional silos of education and medicine need to be involved (and how much is already going on in each). Finally, it is clear that health promotion, and in particular its historical base in health education, is an appropriate field of work for addressing health literacy issues.

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## Conference proceedings

There are numerous conferences throughout the world presenting approaches to behavioural and social change using health promotion perspectives. In some cases the contexts are found in abstracts and in others, in documents of conference proceedings. These abstracts and conference proceedings are often difficult to access because many organisations only maintain a conference archive of abstracts for a limited or specified time period and therefore they cannot be retrieved using an internet search. Nevertheless, the oral and poster sessions, symposia and workshops held during these conferences provide an information base coming somewhere between the journal-based published literature and the 'grey' literature.

For the purpose of this review, the websites of the most recent global conferences held in the past three years were scanned for oral and poster presentation abstracts (or conference programmes where abstracts were not available) relating to health promotion practice. These included: the UN High Level Meeting on Non-Communicable Disease in New York (2010), WHO's Conference on Social Determinants of Health in Rio de Janeiro (2011) and WHO's Eighth Global Conference on Health Promotion in Helsinki (2013). Unfortunately, there was a dearth of information on either abstracts or presentation topics addressing good practices relating to specific health promotion programme case studies, good practices documentation in general, or non-communicable and communicable disease prevention, specifically. For example, during the Helsinki conference on health promotion, only four out of 38 parallel sessions addressed health promotion practice, be it programme interventions or implementation issues. These included a review of evidence-based health promotion implementation (USA), evidence on how to scale up health promotion (Singapore), the use of social movements in the prevention and control of non-communicable diseases (Pakistan), healthy workplace interventions (Chile) and innovative practices in health promotion for communicable disease (Europe). The latter session, entitled 'Innovative practices of health promotion can contribute to communicable disease prevention within the framework of HiAP' and presented by Margaret Barry, University of Galway, Ireland; Guenaël Rodier, WHO Regional Office for Europe; Stephan van den Broucke, University of Louvain, Belgium and Ùlla-Karin Nurm, ECDC, is of particular relevance for this review. During the discussion, it was noted that communicable diseases get very little attention in the health promotion literature and practice and as a result, the potential of health promotion in communicable disease prevention is not yet fully exploited. Panellists highlighted the importance of understanding the factors that impact on infections and communicable disease in a broader context (lifestyle factors as well as individual, social and societal determinants); developing interventions based on existing and well-tested models of non-communicable disease prevention and health promotion rather than reinventing the wheel, and recognising the potential role of and need for collaboration with other sectors besides health (i.e. education) in preventing communicable diseases. It was demonstrated that health promotion can offer expertise on communicable disease prevention in terms of how to understand and address health problems by looking at their determinants in a broader context, expanding beyond the health sector to encompass (1) lifestyle and behaviour related to communicable diseases (behavioural models, health literacy, communication methods); (2) the social context (socio-ecological models, the settings approach, social determinants of health, community approaches for the hard-to-reach) and (3) planning, implementation and evaluation of interventions in complex settings.

Although the Rio conference on the social determinants of health had a range of country experiences from both industrialised, middle-income and developing countries that discussed the approach, the case examples often focused on institutional capacity development, policy formulation, and research/assessment issues. Only a minority addressed programme interventions, especially on community participation/empowerment. Similarly, the UN High Level Meeting on Non-Communicable Diseases tended to focus on the epidemiological dimensions of chronic disease, overall strategies and policy formulation/advocacy, with less focus on programme interventions.

The review also included a scan of conference websites for a small sample of internationally-known public health and health promotion associations to determine if oral or poster sessions were presented that could inform health promotion practice for communicable diseases. The public health organisations (wider focus) that were screened included: the European Public Health Association (EUPHA), the American Public Health Association (APHA), the Canadian Public Health Association (CPHA) and the Public Health Association of Australia (PHAA). In terms of the more specific health promotion focus, the organisational conference websites screened were the International Union for Health Promotion and Education (IUHPE) and the Society for Public Health Education in USA (SOPHE). In searching for relevant abstracts, the search criteria included the following key words: 'health promotion', 'health promotion and chronic diseases, including non-communicable diseases', 'health promotion and communicable diseases' and 'health promotion and communicable diseases'. Several obstacles were encountered:

- previous conferences (prior to 2013) were not archived online for public access (ex: EUPHA, IUHPE);
- some archived conference information only contained the final programme agenda and no abstracts of oral and/or poster sessions (ex: CPHA 2011, PHAA-CDC Conference);
- limited access to website information as a non-member (ex: EUHPA), and
- missing information on the total number of accepted conference abstracts, for comparison purposes with the health promotion-focus submissions (ex: APHA).

Findings are summarised in Table 1.

**Table 1. Annual public health conference abstracts relevant to health promotion**

Selected annual conferences	Total abstracts	Health promotion	Health promotion + chronic diseases (non-communicable diseases)	Health promotion + communicable diseases	Health promotion + infectious diseases
EUHPA 2013 - 2011 <sup>*</sup>	NA	NA	NA	NA	
APHA 2013, Boston	NA	2165	426 (14)	66	49
APHA 2012, Chicago	NA	2257	459 (2)	76	46
APHA 2011, Washington DC	NA	2482	514 (3)	76	41
PHAA 2013 42 <sup>nd</sup> Annual Conference, Melbourne	82	12	NA	NA	NA
PHAA 2012, Sexual & Reproductive Health	72	12	NA	NA	NA
PHAA 2011, CDC Conference, Canberra	72	0	NA	NA	NA
CPHA 2013, Ottawa	255+82 posters	20 +5 posters	NA	NA	NA
CPHA 2012, Edmonton	220 + 76 posters	10 + 3 posters	NA	NA	NA
CPHA 2011, <sup>†</sup> Montreal	238 + 99 posters	7 + 5 posters	NA	NA	NA

NA = Information not available online

Further conference websites were also scrutinised for other non-governmental organisations focussing on health promotion and the results are listed below:

<sup>\*</sup> A relatively young organisation, EUPHA was founded in 1992 and is composed of 71 public health associations and institutes from Europe. Although the conference programme and abstract summaries from previous conferences were not available on the website for a non-member, the theme of the upcoming conference in November 2014 is relevant to this review and might provide additional insights on the application of health promotion practice in Europe: 'Mind the Gap: Reducing Inequalities in Health and Health Care (November 2014)'.

<sup>†</sup> Oral sessions and poster abstracts not available to review so determination based on topic title alone.



**Table 2. Comparison of annual health promotion conference sessions/abstracts relevant to health promotion for communicable diseases**

Conferences	Total abstracts	Total sessions* (practice focus)	Example of health-promotion sessions relevant for non-communicable and communicable/infectious diseases
IUHPE 2013	≈1500	255	<p>Health Literacy and Non-communicable Diseases/Chronic Diseases: Research, Practice &amp; Policy Perspectives'</p> <p>'Interventions in Non-Communicable Disease Prevention and Control'</p> <p>'Integrated &amp; comprehensive programme for the prevention and control of Non-Communicable Diseases in the Philippines'</p> <p>'What practitioners do: is this the best basis for intervention development which is innovative, effective and implementable?'</p> <p>'Innovations in Community Health Promotion'</p> <p>'Knowledge translation to improve communication strategies within childhood vaccination programmes in low and middle income countries: opportunities and challenges'</p> <p>'HIV/AIDS interventions'</p> <p>'Non-communicable diseases' &lt;posters&gt;</p> <p>'Boasting quality of interventions'</p>
2012 - EURO (Tallinn)	102	24 (20)	<p>'Health communication activities for the prevention and control of communicable disease in Europe: research result'</p> <p>'Families and adolescents quit tobacco: Designing interventions with a family-oriented approach'</p> <p>'Community health champions – an asset-based approach to community mobilisation for health'</p> <p>'Availability and quality of Non-Communicable Disease-related services provided by primary healthcare facilities in Mongolia'</p> <p>'The puzzling impacts of education policies on communicable diseases'</p> <p>'Economic crisis and communicable disease control'</p>
2010	2136	170	<p>'Promoting and Preventing Non-Communicable Diseases in Urban Settings in Developing Countries: From Evidence to Practice'</p> <p>'Non-Communicable Diseases in Africa and Other Developing Countries: Integrating a Health Promotion Approach in Non-Communicable Diseases'</p> <p>'Community Health Promotion Interventions'</p> <p>'Good Practice in Health Promotion' &lt;workshop&gt;</p> <p>'Communicable diseases: malaria, tuberculosis, influenza' &lt;posters&gt;</p> <p>'Systematic Review of Health Promotion &amp; Public Health Interventions' &lt;workshop&gt;</p> <p>'Public Health and Disease Prevention'</p> <p>'Chronic Diseases' &lt;posters&gt;</p> <p>'Good Practices and Health Promotion'</p>
SOPHE 2013	NA	64 (25)	<p>3 – 'A cross-border model for cancer prevention, treatment and survivorship through the use of community healthworkers' (<i>promotores de salud</i>) in lower Rio Grande Valley'</p> <p>'The household's role in communicable disease and mosquito net maintenance'</p>
2012	NA	50 (8)	<p>3 – 'Community healthworker effectiveness in preventing and managing chronic disease across Asian-American ethnic groups'</p>

\*Sessions = workshops, symposia, oral and poster, including traditional, electronic and guided, parallel sessions

Given the extensive range of health promotion issues and concerns addressed through the professional competencies in research/evaluation, policy development, capacity building and programme practice, the abstracts and sessions from health promotion conferences cover a wide range of topics, from sexual/reproductive health to non-communicable diseases (and to a lesser extent communicable diseases), and practice settings (e.g. school, communities). At the last two IUHPE and SOPHE conferences, it was surprising to note the limited number of sessions or abstracts that directly discussed programme interventions for non-communicable or communicable/communicable diseases. This is in direct contrast to the number of sessions on practice models, theories, knowledge, attitude, practice and perception studies.

In summary, the findings of this review of global and national conference programmes reveal less evidence of lessons learned and good practice on specific programmatic interventions for health promotion than would be expected. In particular, there was a dearth of information on good practice documentation in general and on non-communicable and communicable disease prevention, specifically. Nonetheless, at its most recent world conference, IUHPE, along with ThaiHealth, inaugurated the 'Health Promotion in Practice Award' which was given for the first time ever to three recipients: Dr. Gene R. Carter (USA), Executive Director and CEO, ASCD; Prof. Don Eliseo Lucero-Prisco III (Philippines), University of the Philippines and University of Liverpool; and Prof. Prakrit Vathesatogkit, MD, FRCP (Thailand), Action on Smoking and Health Foundation and Advisor to ThaiHealth Foundation and the International Network for Health Promotion Foundations. This award sets a precedent for future recognition of the importance of practice and increased emphasis on intervention research, which could directly inform future health promotion practice for communicable diseases and reinforce on-going efforts to prevent non-communicable diseases.

## References – List of conference proceedings

### European Public Health Association (EUPHA) – annual conferences

November 2013: 'Health in Europe: Are We There Yet?' (Brussels)

November 2012: 'All-Inclusive Public Health' (Malta)

November 2011: Fourth European Public Health Conference (Copenhagen)

### American Public Health Association – annual conferences

November 2013: 'Think Global, Act Local' (Boston)

October 2012: 'Prevention and Wellness across the Lifespan' (San Francisco)

October-November 2011: 'Healthy Communities Promote Healthy Minds and Bodies' (Washington DC)

### Public Health Association of Australia (PHAA)

September 2013: Forty-second conference - A 'Fair-Go' for Health: Tackling physical, social and psychological inequality

2011: Communicable Disease Control Conference

November 2012: First National Sexual and Reproductive Health Conference

September 2012: Population Health Congress (Adelaide) –only keynotes available/ no information.

### Canadian Public Health Association

June 2013: 'Moving Public Health Forward: Evidence, Policy & Practice' (Faire progresser la santé publique: preuves, politiques et pratiques) Ottawa

June 2012: 'Public Health in Canada: Creating and Sustaining Healthy Environments' (La santé publique au Canada: Créer et soutenir des environnements sains) Edmonton

June 2011: Public Health in Canada: 'Innovative Partnerships for Action' (La santé publique au Canada: Des partenariats innovateurs en action) Montreal

## Health promotion conferences

### Society of Public Health Education (SOPHE)

April 2013: Sixty-fourth Conference, Orlando 'The Magic of Health Education: Vision, Imagination and Transformation'

October 2012: Sixty-third Conference, San Francisco 'Mining Golden Opportunities: Health Education, Policy, Research and Practice'

April 2012: Mid-year Scientific Meeting, Nashville 'Tuning up Health Promotion: New LYRICS across the lifespan'

### International Union for Health Promotion and Education (IUHPE)

August 2013: Twenty-first World Conference on Health Promotion –'Best Investments for Health' in Pattaya, Thailand

September 2012: Ninth European Health Promotion Conference – Health and Quality of Life: Health, Economy and Solidarity, Tallinn, Estonia

July 2010: Twentieth World Conference on Health Promotion – 'Health, Equity and Sustainable Development' in Geneva, Switzerland.



## Resources outside the traditional venues for scholarly communication (grey literature)

Due to the ambitious nature of identifying relevant and documented field experience via project documents, unpublished papers and other informal sources of information, a preliminary scan of health-related public health and health promotion professional websites was carried out: e.g. EuroHealthNet, with emphasis on the European Portal for Action on Health Inequalities; the European Public Health Association (EUPHA) and a review of European health by a consortium of health organisations under the auspices of EuroHealthNet [79]. Programmes identified as good practice by The Communication Initiative ([www.comminit.com](http://www.comminit.com)), Coregroup and Communication for Development Network ([www.c4dnetwork.ning.com](http://www.c4dnetwork.ning.com)) were also reviewed, along with WHO, UNAIDS and UNICEF publication databases and background papers submitted to the Rio Conference on Social Determinants of Health (2011) and the UN High Level meeting on Non-Communicable Diseases in New York (2011). A request to members of the more generic professional networks (Communication Initiative and C4D Network) for information about health promotion programmes (lessons learned or good practices) did not yield any relevant information. The websites of the European Public Health Association (EUPHA – [www.eupha.org](http://www.eupha.org)), American Public Health Association (APHA – [www.apha.org](http://www.apha.org)), the Society of Public Health Education (SOPHE – [www.sophe.org](http://www.sophe.org)) and the International Union for Health Promotion and Education (IUHPE – [www.iuhpe.org](http://www.iuhpe.org)) were also searched. The public health association sites tended to focus on health systems and policy issues and contained little information directly relevant to health promotion practice. Even though a Health Promotion Section has been established at EUPHA, the members' primary focus has been on a context perspective of health promotion (i.e. neighbourhoods, settings etc.) and there has been no focus so far on communicable diseases. In keeping with this focus, the primary theme of the last two annual workshops has been structure-agency approaches.

Although IUHPE and SOPHE were geared towards health promotion professionals, their sites did not contain programme-related data on good practices or lessons learned. Instead they emphasised evidence in the formal, published literature. Based on the evidence available in the preliminary scan, a search was made for health promotion projects — in Europe and elsewhere — focussing on the following health problems:

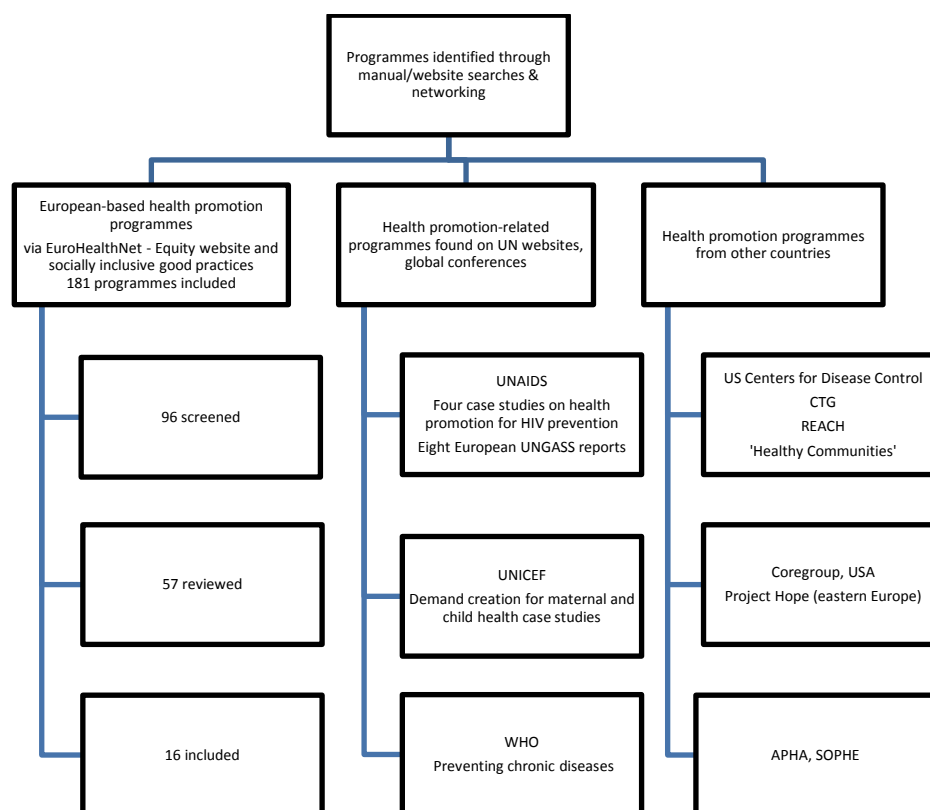
- Chronic diseases (cancer, smoking and/or lung disease, diabetes, overweight/obesity)
- Communicable diseases (tuberculosis)
- Sexually-transmitted diseases – HIV AIDS, human papilloma virus (HPV).

In addition, health promotion programmes were investigated that were not just disease-focused but took a more holistic approach to promoting health, as exemplified by the Healthy Communities initiative launched by the Centers for Disease Control in Atlanta.

The approach to the evidence review of the grey literature was also guided by a particular interest in identifying European health promotion interventions led by civil society partners as well as national and local government initiatives. As a secondary measure, initiatives were identified in other countries that might inform the analysis. To complete the scan, health promotion programmes were selected with the following characteristics: 1) a salutogenesis\* approach to programme design and implementation; 2) specific strategies/activities that reflected participation and empowerment principles of individuals, social networks and/or communities; 3) an equity and/or rights perspective in determining and reaching out to specific populations and 4) the application of a social-determinants-of-health framework (i.e. factoring in the economic and wider social conditions that also affected health and well-being) as well as a cross-cutting focus of health promotion programmes and interventions designed to reach out to disadvantaged, ethnic minority or marginalised population groups in Europe.

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\* Salutogenesis = the process of healing, recovery, and repair. (Source: <http://medical-dictionary.thefreedictionary.com/salutogenesis>)

**Figure 2. Results of the eligibility screening**

Moving beyond a focus on the content of health promotion actions and messages, the review also takes into account how projects were implemented. The 'Communicate to vaccinate' (COMMVAC) taxonomy [80] provided a useful framework which was adapted to examine the interventions. It facilitated categorisation of intervention components into the following categories, which helped to generate a more complete perspective on lessons learned:

## Information or education to facilitate decision-making

The health promotion interventions that exemplified this characteristic were those that were tailored towards empowering communities/stakeholders via education or information activities in relation to a particular chronic disease and how to prevent or manage it.

A combination of face-to-face health education sessions, campaigns, and print/mediated health messages were used in various health promotion programmes to reach target populations, especially the most marginalised or hardest to reach. In Europe, these groups tend to be ethnic minorities, migrant or immigrant families with different cultural and social norms. The most common strategy used in the programmes reviewed was face-to-face interaction with health professionals, community health or family support workers, and/or community representatives/peer educators. Print and mediated educational materials were also made available, with particular attention paid to multi-language development. Other programmes described explicit efforts to initiate campaigns in informal settings such as parks, banks, bus depots (i.e. Clocking in on Men's Health<sup>\*</sup>) frequented by the population of interest, the establishment of parent cafes (Guardian Angels) and the use of community health radio for communication outreach, even in an urban setting. The Community Health Champions developed dramas and put together exhibitions that addressed a variety of chronic disease prevention issues. Activities also involved developing refresher/reminder tools, guides or other complementary materials to which stakeholders could refer when making decisions about their behaviour.

The power of peer work is exemplified in Norway's disease prevention efforts for tuberculosis (TB). The collaborative programme between two health associations (Heart & Lung and Diabetes) consists of conversational counselling and different types of face-to-face encounters between current and former TB patients. Evidence has found that the personal experience of peers has been of great use to persons living with the disease. The main idea behind peer work is to enable those who have TB to meet or talk to someone who has been through the same

<sup>\*</sup> See Annex 1 for source information on all of the interventions mentioned in this section.

experience. The volunteers offer peer-to-peer support through a national TB helpline and a hospital visiting service. This experience, replicated by other health promotion programmes, has shown that peer involvement as lay advisors or experienced experts has a dual benefit – personal empowerment of the peer and increased receptivity of health promotion messages by the intended stakeholder and greater likelihood for change. The thrust of the peer-patient interaction was to go beyond mere information dissemination and focus on understanding the disease implications while providing individuals with a sense of self-efficacy (they could control their lives) and ultimately hope. A similar engagement is found in the tuberculosis programme in Kosovo that is being managed by Project Hope, which also found that increased individual empowerment was a success factor for changing behaviour related to this communicable disease.

## Skills development

These interventions were targeted both to health providers and/or local communities/parents/young people via workshops, courses, training sessions and similar to help them internalise their own knowledge about disease prevention or health promotion and prepare them to help others.

Skill development activities were especially prominent in programmes that focused on engaging community members and local stakeholders in health promotion and/or disease prevention activities. For example, the programme 'Mit MiGranten Für Migranten' engaged fairly well-integrated persons with immigrant backgrounds who were then instructed on health issues and used as contact persons to reach different target groups. In addition to engaging respected community members as health promotion advocates, some other programmes also provided specialised training to health practitioners to enable them to become 'cultural mediators' (*Motion for etniske minoriteter* – Exercise for Ethical Minorities – Denmark). Different programmes describe 'training of trainers' workshops held and types of tools developed to support the health promotion activities (e.g. DVDs in the 'Community Health Champions' programme) or joint training of health professionals and community members. In the latter instance, one national government recognised and provided certification for a three-year educational programme designed by health promotion professionals for the development of 'family supporters' (Experience Experts – Belgium).

## Enabled communication

These interventions included efforts to minimise cross-cultural misunderstandings of health promotion content and maximise cultural acceptability of the actions being promoted to prevent disease among culturally-diverse communities.

Whether working with Roma or immigrant communities, one distinguishing characteristic of the health promotion programmes reviewed was their efforts to communicate health promotion advice in a culturally relevant and sensitive manner. In some instances, this involved developing multi-language educational materials with relevant images and cultural contexts which could be tailored to specific ethnic or language minority communities. Recognising the importance of communicator characteristics in getting a health message across, some of the health promotion programmes engaged local community members as lay advisors (who, depending upon the programme, were referred to as peer educators/volunteers, community health champions, experience experts, etc.) who helped facilitate knowledge transfer, were actively involved in promoting behaviour and social change initiatives and provided advice and support to families as needed during the change process. In the United States, the Centers for Disease Control's Racial and Ethnic Approaches to Community Health (REACH) programme was specifically designed and implemented with this concept in mind. In its cancer prevention work, Barefoot Health Workers Programme (Wales) worked with honorary mediators which enabled 'own language' promotion of key health messages on breast screening.

## Enhanced community ownership

These programme interventions placed a strong emphasis on engaging and maintaining community buy-in for health promotion actions and understanding the problem, as well as generating grassroots/local support for the social change and behaviour change interventions being promoted.

Leveraging community engagement and action was a central component of many of the projects examined, whether in Europe or in other countries, especially those addressing equity concerns or marginalised communities. Since the majority of the health promotion programmes were community-based, they often used 'intermediaries' to engage in health promotion dialogue and interactions with hard-to-reach stakeholder populations in need. This entailed using community health workers (health professionals who visited or provided support to community members within their own community) and/or engaging local residents as volunteers to serve as peer educators in promoting health-related social and behaviour change actions among families and caregivers (i.e. guardian angels, experience experts). In a similar manner to other health promotion efforts, the Community Health Champions initiative within the Altogether Better programme followed an empowerment principle and consulted local communities on how best to address health issues of concern. By engaging community members who were already living with the particular disease of interest or were disease survivors as part of their health promotion team, either formally or informally, credibility and access tended to increase. By linking lay advisors/peers' familiarity with local

issues to the health promotion and disease prevention objectives, these community resource people were involved in assessing needs and helped to design and monitor the activities. As a result, the health promotion programmes were more effective in penetrating and reaching most marginalised citizens, bringing visibility to those forgotten and hearing the voices of those who had been left behind from other, wider initiatives.

The 'low barrier method' was also a common characteristic where health services, complementary to health promotion activities, were brought to community members rather than their having to seek them externally. As such, the intervention was not bound to formal, official structures, and there was a higher level of autonomy where health promotion services took the form of 'family visits' rather than more formal 'health consultations'. Programmes were run by local staff, with local management and addressed a local agenda (NICHE). These interventions had a snowball effect, which contributed to wider community acceptance of disease prevention and health promotion actions.

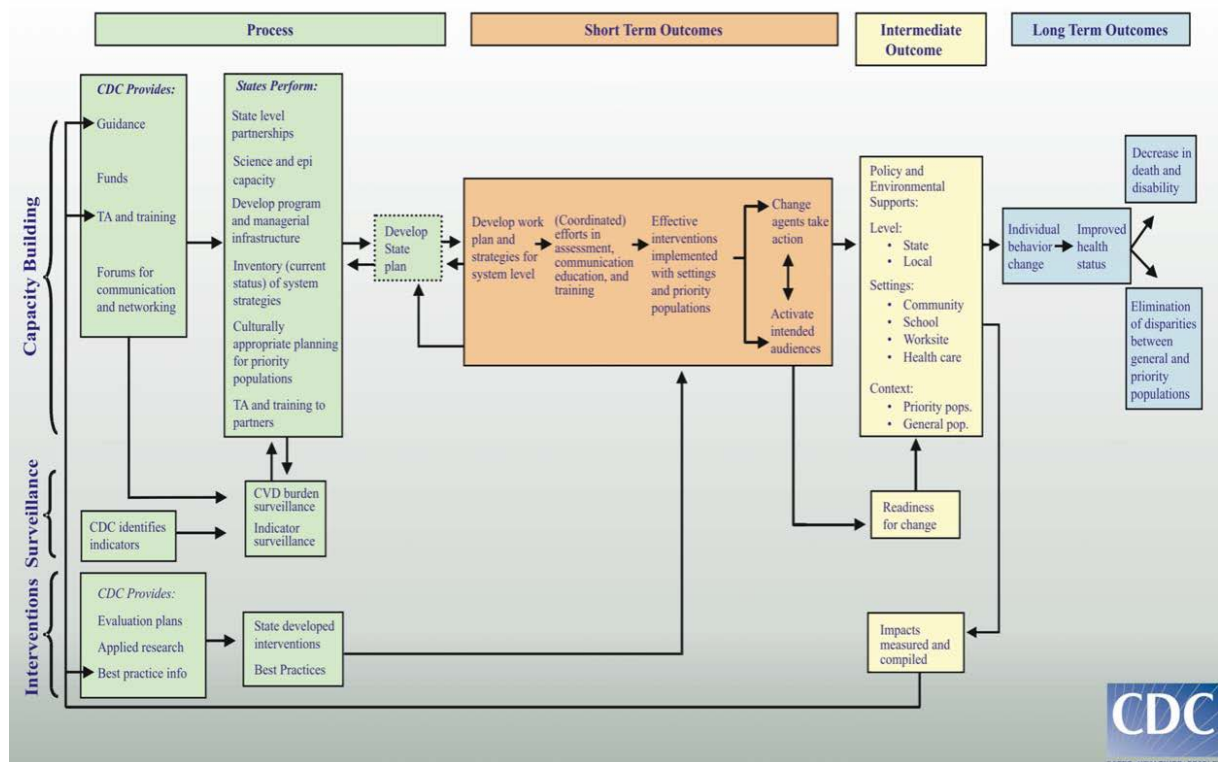
### Other programme trends and characteristics

In addition to political will and commitment, an analysis of HIV/AIDS case studies and reports reinforces the lessons learned from the health promotion programmes described earlier. Interventions tackling HIV/AIDS prevention found that building community capacity and involving individuals affected by the disease in health promotion interventions allowed these interventions to become credible sources of information, and their actions mirrored the potential positive uptake of desired behaviour change. Three additional indicators of good practice are: alliance-building and networking between local communities and more formal health organisations; development of safe and supportive (enabling) environments and multi-sectorial approaches. Similarly, UNICEF's work in maternal and child health highlights the pivotal role that can be played by demand creation via health promotion activities to expand beyond a focus on individual behaviour to the larger social and normative change perspective.

In terms of health promotion content and focus, the health promotion programmes studied had a tendency to frame their health issue of concern within a wider context of health and well-being, taking into account community characteristics, immigrant status, language barriers, etc. There was more balance between individual risk and responsibilities (addressed by information campaigns) and a wider view of human behaviour and health (e.g. more comprehensive programming addressing social and cultural determinants of behaviour, enabling environments).

This comprehensive approach is captured in the following framework developed by CDC. It conceptualises the essential dimensions of health promotion programme development and summarises the different components relevant in designing a programme and its interventions:

Figure 2. Programme logic model



Source: US Department of Health and Human Services

Although this model was developed by the Cardiovascular and Stroke Division at CDC as a programme planning tool, it is also pertinent for the development of health promotion interventions targeting communicable diseases.

In addition to programme design and implementation activities, a review of the grey literature reveals a range of resources and toolkits that have been developed to assist practitioners at all levels in their work. For example, in the United States, CDC sponsored development of 'community guides' to enable local government and communities to work together to address problems of chronic diseases (e.g. cancer screening among African-American women in the south, reduction of tobacco use in the Midwest and southern states and obesity awareness among tribal communities in Alaska). These guides are a compilation of lessons learned and good practices that have been assembled around 25 public health topics. They are based on systematic and economic reviews of different interventions with the aim of documenting what works in public health and the associated costs. Similarly, EuroHealthNet, in partnership with the European Commission, has developed quality assurance and improvement tools and put together a cadre of trainers/facilitators to support HIV programmes throughout Europe. These efforts have also been complemented by the launch of a good practice database covering a wide range of health promotion-related issues and concerns. Additionally, all the websites of the UN agencies reviewed contained a wide array of programme guidance (in different formats) ranging from design to implementation and evaluation that would be relevant to health promotion programmes.

## Limitations of the review

The general thesis being examined is that interventions taking a health promotion approach to non-communicable disease prevention will be relevant for interventions on communicable diseases. Thus there is no simple systematic approach that can be used to launch the search effort with a direct query. This was tried with several of the major standard search protocols but yielded virtually nothing. It might be possible, with considerable funding and human resources, to scan all the search protocols with multiple combinations of words including all diseases and all models or approaches to yield a comprehensive listing of all combinatorial resources of relevance. However, this approach, which is used by large-scale systematic research institutions, is almost always limited to a very narrow topic with limited variables and a singular disease outcome. Even in such cases (the Community Guide, NICE, Cochrane, etc.), the yield of articles and resources is quite unmanageable and requires extensive filtering of methods, designs and scientific quality. Even after filtering, the yield of useable articles is quite small as a percentage of the total reviewed. As a result, it becomes more difficult to answer the basic research question or thesis proposed. For this reason, the focus was directed more towards examining large-scale reviews during a second stage. While this may be seen as a limitation of the study, it served as a mechanism for obtaining the most appropriate answer to the underlying thesis.

Another limitation of this study is characteristic of literature reviews in general: the limitation of language. A very high percentage of all published scientific literature is currently in the English language, even when the primary authors and investigators are not native speakers of English. Moreover, much of the methodological literature, including the rationales for how to conduct research, is biased towards a western, English-based perspective. Although it might be argued that in the 'grey' literature this bias is reduced, the search engines simply do not pick up literature in other languages. Recognising this bias has led some institutions to try and expand their language access base. However, in most cases this is still limited to the main European languages and does not reduce the bias much because many researchers who are non-native speakers of English report their results in the English language literature. The advantage is that institutional review efforts will pick up these results. The disadvantage is that they may not be discerned as the efforts of particular countries or groups when collected in tabular form with other studies in the same subject areas. The result is that large reviews and institutional efforts tend to be global in their orientation rather than country-based.

These two significant limitations can be addressed, but only by a change in working methods. It would require significant manpower to examine all the relevant literature in multiple languages and a less rigorous pre-screening of the methodology and design of studies. Because the potential yield of relevant studies might be high, a very sophisticated algorithm of analysis would need to be developed. This algorithm would need to be conceptually understandable to all those working on the project. Finally, in the future there will be a need to take into account social media and new methods of internet interaction relevant to the research question.

## Limitations of the grey literature

Although the grey literature review identified four salient common lessons with implications for designing health promotion programmes for communicable disease prevention, the reviewer was surprised by the dearth of accessible information on good practice in health promotion, case studies and lessons learned (specific programme information) on the websites of professional organisations. The only exception to this was EuroHealthNet. At times, when a potentially interesting programme was described, the link to fuller documentation was no longer active and a Google search did not find relevant information. A cursory scan of national public health departments or institutes in selected European countries revealed a paltry amount of information – if programmes were mentioned, no documentation was provided.

This review is not exhaustive for several reasons:

- In conducting the review a common problem arose in attempting to identify and review relevant field work and programmes in health promotion – access and visibility. Although information can be found on disease prevention it tends to be focused on control and management of infectious and/or non-communicable diseases, or on physical activity, exercise and smoking cessation.
- Health promotion programmes being undertaken in eastern Europe may be under-represented because information is clearly lacking from this part of the region although this does not mean that no work is being done. Firstly, websites visited for case examples from eastern Europe tended to be more health systems-focused than health promotion and thus were excluded. Secondly, it is entirely possible that language differences mean that the documentation is not easily available or is not being shared with public health and health promotion organisations in the region for dissemination.
- Although the health promotion programmes reviewed were very descriptive with few exceptions (Choosing Health Programme, Community Health Champions), a conceptual or theoretical model guiding the programme design was not available for review. However, all programmes identified key guiding principles, such as empowerment or capacity development, as components of their work. Similar to the findings of the scientific literature review, little information is available about the intervention components and mechanisms – what worked and why – in the available written documentation. More details would require direct engagement with the project/programme sites.



## Conclusions

This section synthesises and analyses the implications of the literature presented above, both in terms of knowledge translation and the relevance of what has been found for the European context.

### Knowledge translation

Knowledge translation, while widely lauded in the public health and health promotion literature, remains still somewhat preliminary. While knowledge synthesis has been quite extensive in the areas under consideration, it may still largely be characterised as a systematic cataloguing and classification of studies. Although the findings constitute a very large database, they remain somewhat fragmentary and not very cumulative. It is this cumulative base (building from the first research efforts to a stronger findings base) that is necessary to build a strong foundation for knowledge translation. The Canadian Institutes of Health Research defines knowledge translation as a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve health, provide more effective health services and products and strengthen the healthcare system [81]. This process takes place within a complex system of interactions between researchers and knowledge users. The process may vary in intensity, complexity and level of engagement, depending on the nature of the research, the findings and the needs of the particular knowledge user. According to these criteria, the translation of health promotion knowledge to address non-communicable diseases is still in the early stages of development. Many of the same limitations are valid when applying this knowledge to communicable diseases. An additional reservation with regard to knowledge translation is that much of the applicable literature has focused on less developed countries than those in Europe.

The good news regarding knowledge translation is that, as a result of the recognition of its current limitations, concerted efforts have been made to develop an implementation science. As a result, there have been efforts to re-examine the huge amount of previous systematic evidence to identify interventions worthy of translation and dissemination. At present, most of the work in this area is still in clinical care literature. In addition, efforts are also being made to develop intervention research to aid this area. 'Population health intervention research involves the use of scientific methods to produce knowledge about policy and programme interventions that operate within or outside of the health sector and have the potential to impact health at the population level' [82]. In the next few years, work on both intervention and implementation research should yield a sound basis for knowledge translation and the application of the health promotion base to address complex approaches in communicable diseases. Based on lessons learned and practices documented in both the formal and grey literature reviewed, it is possible to translate current knowledge into 'good' if not 'best' practice options.

### Relationship between theory and practice in health promotion

Although this report has drawn on health promotion approaches and theories as applied to the study of non-communicable diseases, it is important to emphasise that, in general, health promotion and health education are very pragmatic fields with a practical orientation. The field has relatively little in the way of basic research and relies almost entirely on the science bases of sociology, psychology, political science and epidemiology. Indeed, the field of health promotion shares much with the emerging field of intervention research in public health. The main achievement in this emergent field is the importance of understanding a) the process mechanism involved in an intervention, as opposed to focussing on outcomes b) the need to see causality as difficult to determine when interventions are complicated and multivariate, and c) the need to develop new ways of understanding the successes and failures of interventions. The authors recommend developing this line of inquiry further.

### Difficulties of action and participatory research in health promotion

Health promotion interventions are not only practical, but they are dynamic. There are three key dimensions to this dynamic character. The first is that the variables being considered in any intervention are themselves subject to change during the intervention period. The second is that change over time is a key factor, but because of the change over time static models or research can be compromised. The third is the participatory nature of most health promotion interventions, where participants are not seen as the subject of the study, but rather as active participants in the study. This means that interventions with highly fixed designs will not be very applicable to health promotion interventions. Unfortunately, as revealed in this report and elsewhere, prefixed designs are commonplace in most public health research. While many researchers and practitioners in the fields of public health and health promotion realise this, there is still a major need to develop better participatory methodologies and a strong need to have these methodologies recognised in the scientific literature and in research protocols.

## Additional lessons from experience in tobacco and health

One area of great success in many types of health-promoting interventions relating to chronic disease is that of tobacco and health. Indeed, because this literature is so extensive, it was not covered in any detail in the review. However this is a potentially rich area on which to concentrate the development of new approaches, to explore the literature for insight into the very process of health promotion interventions. We know the outcomes of extensive work in public health in relation to tobacco, from the policy area (WHO Framework Convention on Tobacco Control), to individually-based efforts in health education to reduce smoking behaviour. However, a great deal more could be learned through a systematic investigation of the dynamics of these efforts and how to model them. If successful, such a systematic investigation might yield important insights into the greater complexity of addressing the social determinants of health from a pragmatic rather than a descriptive position.

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## Optimistic approaches and conclusions for practice

The combined scrutiny of scientific publication findings, health promotion interventions and health promotion conference proceedings/abstracts also provides further insight into recommendations for practice that would be relevant for the prevention of communicable diseases. These complement the research-related recommendations and are listed below.

### Conclusion 1: Applying the socio-ecological model as an overarching theory of change in designing disease prevention programmes

Whereas effective health promotion interventions are informed by evidence-based theories of behaviour and social change, it was also found that actual programme design should be informed by an overarching theory of change. In this regard, the socio-ecological model is most useful in conceptualising a prevention programme for communicable diseases because it also takes into account the inter-dependent levels of influence on the behaviour of individuals, groups and decision-makers and also recognises that most challenges to health and well-being are complex. In summary, experience in health promotion programming shows that most effective and sustained change takes place when all levels are addressed and this would also be relevant for communicable disease prevention programmes. It is clear from the evidence deriving from the myriad systematic reviews and the general recommendations emanating from institutional efforts to examine evidence in health promotion, that interventions in this area are theoretically and mechanically complex. Population approaches must adopt the idea that successful interventions need a multi-causal approach and are most appropriate if they also encompass some type of a socio-ecological framework. Having said that, it is also clear that the effect on individual variables within these complex models is not significant and the methodology to form an aggregate conclusion of effect is not yet well established. The social determinants of health framework is recognised as being of high value and it complements a socio-ecological framework as a robust theory of change model for disease prevention programming. As such, it combines individual behaviour and social change models and lays the foundation for programmes that may be translated into specific health promotion strategies and activities to address communicable diseases and enhance health promotion programming in Europe. Finally, there is an opportunity to push for more explicit integration of health promotion theories and models into programme design and implementation through requests for proposals. For example, if funders include requirements for explicit theory of change models that will be used to guide programme interventions, this will encourage practitioners to design better-grounded interventions and ultimately foster improved knowledge translation.

### Conclusion 2: Expanding beyond a focus on individual behaviour change for disease prevention to a wider emphasis on social norms and social change

The health promotion approach to health literacy emphasises community-based knowledge and understanding of disease-related issues and problems. At the same time, it allows for a more holistic approach to addressing communicable diseases by encouraging more proactive community engagement in disease prevention activities. Lessons learned indicate that interventions tailored towards empowering local stakeholders and/or communities have strong potential for disease prevention efforts, both at an individual and collective level. This study identifies a number of approaches worthy of further development and integration into the area of communicable diseases. The area of health literacy appears to be a particularly promising approach to communicable diseases because there are both good syntheses of knowledge in this area and a good understanding of its application. Health literacy has now demonstrated a long history, stemming from initial work in health education with a strong base in educational theory and settings, to the present health promotion efforts aimed at communities and the general population. This is a very concrete area that should be given further consideration.

### Conclusion 3: Applying an equity lens in developing interventions to tackle communicable diseases

Given the mobile migrant and immigrant populations in Europe, and apparent health disparities among different European communities, an equity orientation offers an important perspective to disease prevention programming. Field experience shows that health promotion programmes addressing and tailoring interventions to the most vulnerable and most marginalised populations can make a positive difference in reaching out to those outside of the mainstream and traditional health and medical services. These are families and communities, such as Roma communities in eastern Europe or Somali refugees/immigrants in Scandinavian countries, who are often most at risk of communicable diseases, but also most likely to miss general, traditional disease prevention interventions.

## **Conclusion 4: Increasing community ownership of disease prevention activities**

Health promotion programmes have shown that engaging peers, disease survivors and local champions in a proactive manner is an important tool in addressing health problems. Whereas disease prevention efforts have most often been led by medical and public health professionals, there is programme experience that suggests increased lay involvement in promoting positive behaviour change can effectively reinforce efforts. Lay individuals are able to access community pockets often missed or overlooked through traditional channels. Community ownership is also useful in facilitating knowledge exchange, maximising the 'acceptability' of health information shared and minimising cultural misunderstandings. In fact, as mentioned previously, interventions that build community capacity and involve individuals affected by the disease have enabled these interventions to become credible sources of information, with the potential for the individuals' actions to be mirrored in a positive uptake of desired behavioural change.

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# Annex 1. List of health promotion programmes reviewed in the grey literature

## EuroHealthNet – [www.eurohealthnet.org](http://www.eurohealthnet.org)

Portals: Action on health inequalities; Quality action: Improving HIV prevention in Europe

Promoting social inclusion and tackling health inequalities in Europe: An overview of good practices from the health field, December 2004

Accessing the inaccessible (England)

Adzon Mozaiek (Belgium)

Altogether better (UK)

Barefoot Health Workers Project (Wales)

Byncynon Community Revival Strategy Ltd Healthy Living Centre (Wales)

Choosing health programme (England)

Clocking on to men's health (England)

Community health champions (England)

Experience experts (Belgium)

Healthy parenthood (Czech Republic)

Lifestyle Fridays (England)

Guardian Angel - Support for young families in difficulty (Schutzengel-Germany)

Mediating Romani health (Finland, Romania, Bulgaria)

Mit MiGranten Für Migranten – Interkulturelle Gesundheit in Deutschland [With Migrants for Migrants – Intercultural Health in Germany]

Northside Community Health Initiative (NICHE) (Ireland)

Programme for protecting minorities in Navarre (Spain)

Thurrock community mothers parent support programme (England)

New deal for communities (England)

## CoreGroup USA– [www.coregroup.org](http://www.coregroup.org)

Tuberculosis programme by Project Hope (Kosovo)

## UNAIDS website – [www.unaids.org](http://www.unaids.org)

UNGASS country reports (UNAIDS) – Greece, Germany, Latvia, Finland, Ireland, Czech Republic, Netherlands, Bulgaria.

Good practice - experience from Australia, Canada, Thailand, Uganda.

WHO website – [www.who.int](http://www.who.int)

Portals: Chronic disease/non-communicable diseases, infectious diseases

Preventing chronic diseases: A vital investment

Best buys to prevent non-communicable diseases

## UNICEF website – [www.unicef.org](http://www.unicef.org)

Portals: Maternal and child health, immunisation, HIV AIDS

Innovative approaches to maternal and child health – A compendium of case studies

(Specific review of Afghanistan, Cambodia, China, Pakistan, Philippines, Timor-Leste).

## **CDC website USA – [www.cdc.gov](http://www.cdc.gov)**

Portals: The Community Guide; Communities putting prevention to work; health communities programme; Racial and Ethnic Approaches to Community Health (REACH); chronic disease prevention and health promotion

Saludable Omaha: Development of a youth advocacy initiative to increase community readiness for obesity prevention 2011-2012

## **Interview**

Interview with Ms Mona Drage: Tuberculosis collaboration project between the Norwegian Heart and Lung Patient Organization International (IHL) and the Norwegian Diabetes Association.

## **Other**

Communication initiative – <http://www.comminit.com/global> Communication for Development Network – [www.c4dnetwork.ning.com](http://www.c4dnetwork.ning.com)

## Annex 2. Additional reference material

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