Investing in public health: barriers and possible solutions

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ABSTRACT

Background Health care is a less important determinant of health than behaviour and the environment but paradoxically, spending on health in most countries suggests the opposite. What determines these health policy and funding decisions, and might there be ways to increase investment in public health?

Methods Published papers, reviews and reports on the cost-effectiveness of public health interventions and barriers to investment in public health were reviewed.

Results There is evidence to support investment in public health. Many public health interventions have been shown to save money, and some have cost-effectiveness ratios better than or equivalent to health care interventions. Despite this, there are recognized barriers to investing in public health. These barriers include the greater requirements for cost-effectiveness sometimes placed on public health interventions, the belief that in the long run prevention may cost more than treatment, the timeframes required for some public health interventions, the ‘identifiable victim effect’, the influence of interest groups, and the reality that evidence alone does not drive health policy.

Conclusions Investment in public health has the potential to deliver improved health outcomes. Strategies to address the barriers and increase investment in public health are suggested.

Keywords economics, public health

Health has an intrinsic value. While health care is a less important determinant of health than behaviour and the environment, paradoxically, spending on health in most countries suggests the opposite. Public expenditure on prevention and public health in Organisation for Economic Co-operation and Development (OECD) countries seldom exceeds 10% of total public expenditure on health.

In this study, published papers, reviews and reports on the cost-effectiveness of public health interventions and barriers to investment in public health were reviewed. Potential ways to address the barriers and to increase investment in public health were developed, using examples of successful strategies where possible.

Is there evidence to support investment in public health?

Many public health interventions have been shown to save money, and some have cost-effectiveness ratios better than or equivalent to health care interventions. Examples include tobacco control initiatives, immunization, cardiovascular disease prevention and workplace health promotion programmes.

In 2001, a report on the long-term trends affecting the health service in the UK was commissioned by Her Majesty’s (HM) Treasury. This report, the Wanless Report, modelled three scenarios, and found that the one which required considerable investment in public health was not only the least expensive scenario modelled, but also delivered the best health outcomes.

In Australia, the National Preventive Health Taskforce produced a report outlining the case for improving the prevention of illness and the promotion of health in Australia. The Taskforce took an evidence-based approach which found that effective prevention brings significant benefits to society as a whole, including improved economic performance and productivity.

An American report ‘Prevention for a Healthier America’ found that investment in proven community-based disease
Barriers to investing in public health

Despite evidence to support investment in public health, several barriers have been recognized. Barriers to investing in public health include the greater requirements for cost-effectiveness sometimes placed on public health interventions, the belief that in the long run prevention may cost more than treatment, the timeframes required for some public health interventions, the ‘identifiable victim effect’, the influence of interest groups and the reality that evidence alone does not drive policy. These barriers are discussed in more detail below.

The first barrier leading to inadequate resourcing of public health is the expectation that public health interventions should save money. It has been suggested that this is an unforeseen outcome of cost-effectiveness analyses of public health interventions, which excluded any additional health costs in the life-years gained, leading policy-makers to public health interventions, which excluded any additional improvements in health outcomes, but also cost-savings and economic benefits.

The second barrier is the belief that, in the long run, prevention costs more than other health spending. Allocating resources to public health strategies may be deemed a poor investment, if people will live longer and incur extra health sector costs later. This aligns with the hypothesis that improvements in health will lead to an ‘expansion of morbidity’ with an increasing percentage of life-expectancy affected by ill health.

The third barrier is the timeframe for public health interventions. Some public health interventions may not produce results for many years. This disadvantages public health interventions because most decision-makers operate on a much shorter timeframe. Short electoral cycles of 3–5 years may not be long enough for elected representatives to see the results of a public health intervention, with the disadvantage that ‘their administrations will bear the costs, but the benefits will be reaped on someone else’s watch’.

The fourth barrier is the ‘identifiable victim effect’. If health resources are scarce, many people would prefer to relieve the suffering of an identified individual than to fund an intervention which does not address current ill health, even if that intervention would improve the health of a far greater number of people. Possible reasons for this have been identified as the ‘vividness’ of the image of an identified victim which engenders empathy and a wish to help, the certainty of being able to help a particular individual compared with the uncertainty related to unknown ‘statistical lives’, the proportion of individuals it is possible to help, and the fact that the ‘identifiable victim’ is already ill, whereas prevention is aimed at unknown individuals who are not yet ill.

The fifth barrier is the influence of interest groups. These include health consumer and patient organizations, which may tend to focus on health care and treatment services rather than public health and industry interest groups, such as the tobacco and alcohol industries, which can be threatened by the public health initiatives. These interest groups, in promoting their preferred initiatives, can influence health policy despite evidence to support public health interventions. This overlaps with the sixth barrier as outlined below.

The sixth barrier is that evidence is not the only driver of policy and funding decisions. ‘The policy process, irrespective of the nation or health system, is not a linear, rational model in which an idealized solution for a public problem can be ascertained and optimally implemented.’

The politics of agenda setting, policy formulation, and implementation are complex and, in many respects, uncertain in both their causes and consequences. Institutional fragmentation, multiple veto points, and inadequate resources make it difficult for governmental officials to respond to even the most obvious and serious public health problems.
A systematic review of the use of research evidence in public health decision-making processes found that ‘A common finding from included studies was that competing influences, including organizational, political and strategic factors; financial and resource constraints; personal experience; common sense; expert opinion; stakeholder and public pressure; community views and local competition, restricted the use of research evidence in public health decision making’.

Possible ways to address the barriers to investing in public health

To address the first barrier and remove the expectation that public health interventions must be cost-saving, requires fairness in assessment and resource allocation. Resources for public health strategies should be allocated in the same way as resources for other health strategies; public health strategies should not have to be cost-saving, but ‘cost-effective’. Determining the most cost-effective ways to improve population health requires all types of health intervention (prevention or treatment) to be evaluated by the same criteria.

The second barrier, the belief that prevention costs more than treatment because it causes people to live longer and to cost the health service more in the long term, can be resisted. First, it should be acknowledged that this criticism should not be directed only at public health interventions; treatment interventions also have the potential to extend life, with the possibility of future morbidity. Secondly, extra years of life have value. Thirdly, it should be recognized that interventions which extend life could result in compression of morbidity. The compression of morbidity hypothesis suggests that improvements in health could lead people to live longer, healthier lives, with a shorter period of senescence near the end of life. While the expansion of morbidity hypothesis suggests that an increasing percentage of life expectancy will be affected by ill health and the dynamic equilibrium hypothesis suggests that the number of years lived with disability will increase, but the number lived with severe disability will decrease, research in several countries and over different time periods predominantly supports compression of morbidity or dynamic equilibrium, rather than expansion of morbidity.

The barrier caused by greater willingness to fund interventions which produce immediate or short-term gain over those which take longer to produce results can also be addressed. In some instances, it will be possible to emphasize the short-term effects of public health interventions (for example tobacco control and immunization can produce rapid benefits). In other instances, it may be possible to encourage the policy-makers and funders to recognize public health funding as an investment in future wellbeing. Framing it in this way to the public may also encourage recognition of the potential benefits for their own future health and that of their children and grandchildren, thus personalizing the benefits.

A related way to increase funding for public health interventions, analogous to the ‘identifiable victim’ effect, may be to give a human face to the potential beneficiaries of public health interventions. Combining public health with social marketing approaches has shown that personalizing and tailoring public health messages can be effective. Similarly, rather than focusing on the large number of unidentified people who could benefit from public health interventions, creating an image of a single individual who could benefit, and with whom decision-makers can identify, may lead to increased resourcing of public health interventions.

To address the barrier related to non-evidence-based drivers of funding and policy decisions, including the influence of interest groups, those promoting evidence-based public health interventions should be ready to respond when the timing is favourable, focus on new ways to present information (such as those described above), harness the influence of key personnel and identify links to government priorities.

Results from studies included in this systematic review suggest that in order to increase the use of research evidence in public health policy strategies are required to encourage two-way communication between researchers and decision makers; the environment within which decision makers work, in terms of structure and rewards, should be adapted to encourage the use of research evidence; decision makers need training to access and interpret research outputs; and researchers require training and support to increase their ability to produce evidence of use to policy makers, to clearly present the main findings, and to effectively disseminate them to the relevant audience.

Despite these potential solutions, it is possible that some barriers may persist. Because, even subconsciously, public health and health care interventions may be assessed unequally, there is an argument for ring-fenced funding of public health initiatives. In New Zealand, a significant reduction in public health expenditure occurred when the District Offices of the Department of Health (which had been responsible for public health funding) became part of Area Health Boards (which were responsible for funding hospital services as well as public health services). Conclusions drawn from this reduction in expenditure were that ‘public health funding is vulnerable when managed by organizations whose core business is the delivery of personal health services’, and ‘the combination of sceptical clinicians, disinterested consumers and managers with politically imposed time horizons (much shorter than those for public health
services) means that it is almost inevitable that when public health competes directly with curative services it will be the loser.63 Subsequent health reforms in New Zealand provided ring-fencing of public health funding.63

Discussion

Despite evidence to support investment in public health, significant barriers to such investment have been identified. These barriers have been described and possible solutions are outlined.

Identifying the barriers to investment in public health allows us to develop some understanding of them and to develop possible ways to address them. Strategies which may help to address the barriers to investment in public health have been suggested. These include advocating for public health and health care interventions to be assessed equally using cost-effectiveness analysis where possible; refuting the belief that prevention invariably costs more than treatment and emphasizing that public health interventions may lead to compression of morbidity; reframing discussions to emphasize the short-term effects of public health interventions where possible, and using the analogy that investment provides greater returns later; personalizing the potential benefits of public health interventions, thus creating an image of an individual who could benefit from a public health intervention with whom decision-makers can identify; focusing on the other drivers of funding and policy decisions in addition to the evidence which supports investment in public health; and finally, if some barriers remain insurmountable, considering ring-fenced funding for public health initiatives.

The possible solutions identified in this paper need to be tested in health policy development. Some useful tools for this are already available or under development. National Institute for Health and Clinical Excellence (NICE) recently undertook a project on potential new methods for determining the cost impact and returns on investment from public health interventions.65 The Centre for Public Health Excellence at NICE plans to develop a prototype for local authority commissioners, showing the potential returns on investment in public health interventions.65 Recommendations for bridging the gap between researchers and policy-makers, furthering evidence-based policy, and measuring the impact of public health policy have been made.28–30 A cognitive information-processing framework has been developed to aid health policy decision-makers,43 and a conceptual framework for context-based evidence-based decision-making (which takes into account the decision-making context as well as the evidence) has also been developed.66

References


