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DEBATE

Social vaccines to resist and change unhealthy social and economic structures: a useful metaphor for health promotion

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SUMMARY

The term 'social vaccine' is designed to encourage the biomedically orientated health sector to recognize the legitimacy of action on the distal social and economic determinants of health. It is proposed as a term to assist the health promotion movement in arguing for a social view of health which is so often counter to medical and popular conceptions of health. The idea of a social vaccine builds on a long tradition in social medicine as well as on a biomedical tradition of preventing illness through vaccines that protect against disease. Social vaccines would be promoted as a means to encourage popular mobilization and advocacy to change the social and economic structural conditions that render people and communities vulnerable to disease. They would facilitate social and political processes that develop popular and political will to protect and promote health through action (especially governments prepared to intervene and regulate to protect community health) on the social and economic determinants. Examples provided for the effects of social vaccines are: restoring land ownership to Indigenous peoples, regulating the advertising of harmful products and progressive taxation for universal social protection. Social vaccines require more research to improve understanding of social and political processes that are likely to improve health equity worldwide. The vaccine metaphor should be helpful in arguing for increased action on the social determinants of health.

Key words: social vaccine; social determinants; community participation; health promotion

INTRODUCTION

There is a long tradition in public health that has recognized and called for interventions on the social and economic determinants of health, going back to at least the work of the nineteenth-century Silesian physician Virchow (Waitzkin, 2006). This tradition is reflected in the World Health Organisation's 1978 Alma Ata Declaration on Primary Health Care (WHO, 1978), and the Ottawa Charter for Health Promotion (WHO, 1986). The People's Health Movement (PHM, 2008) has been a strong advocate for tackling the economic, social, political and environmental determinants of health since its formation in 2000, especially

evident in the People's Charter for Health. The work of the Commission on Macroeconomics and Health (CMH, 2001) and of the Commission on the Social Determinants of Health (CSDH, 2008) also provide strong evidence of the importance of structural determinants of health. In particular, the CSDH has argued for a concerted action to close the health equity gap in a generation. Doing this will require a shift in the thinking of many working within the dominant medical paradigm. This paper proposes the application of a vaccine metaphor to social determinants. A social vaccine would have at its heart the need for social movements advocating for health equity to move governments to adopt socially justice, regulatory policies for health and health equity.

The accumulating evidence was summed up by Rose [(Rose, 1992), p. 29] conclusion, based on decades of epidemiological work: 'the primary determinants of disease are mainly economic and social and therefore its remedies must also be economic and social. Medicine and politics cannot and should not be kept apart'. A significant body of evidence (Marmot and Wilkinson, 1999) documents how distal determinants such as the structure of the political economy (Doyal, 1979; Navarro, 2002), the nature of the labour market (Heymann, 2006) and the nature of social life have an impact on health (Berkman and Kawachi, 2000). These same determinants also explain the persistence of health inequalities according to class, gender and race. Despite this evidence, much of the effort and resources devoted to preventing disease and promoting health focuses on the more immediate and proximal behavioural and biological determinants of health. This is true in rich and poor countries. Evidence suggests that when action on the social and economic determinants of health is taken, it is often the result of long-term mobilization by civil society groups whose work acts to protect populations by building resilience against unhealthy policies through a process of political empowerment (Szreter, 1988).

This paper explores the value for the health promotion movement of adopting a metaphor from medicine, the vaccine, as a mechanism to promote the recognition of the importance of popular mobilization in forcing the hand of government and other institutions to regulate and intervene through social and economic policies in favour of the public good and community health. It does this by introducing and defining the concept of social vaccines and by providing three examples of the application and effects of social vaccines. It concludes by arguing that the concept is worthy of further research.

WHAT IS A SOCIAL VACCINE?

The metaphor is designed to shift the dominant biomedical orientation of the health sector towards the underlying distal factors that cause disease and suffering. The value of vaccines in protecting people from diseases by causing an immunological response is widely accepted and understood. Despite the theoretical danger of 'medicalizing' social processes, we believe that on balance such a metaphor can be useful in engaging the medical community and possibly a broader public which is so inculcated with a medical model.

The term has been used previously. For example, the UN's International Labour Organisation (ILO, 2006) and Narayan *et al.* (Narayan *et al.*, 2006) and at the 2006 Global Forum on Health Research (GFHR, 2006). On the basis of previous thinking, we propose the following definition:

A social vaccine is a process of social and political mobilisation which leads to increased government and other institutions' willingness to intervene with interventions, applied to populations rather than individuals, aimed at mitigating the structural social and economic conditions that make people and communities vulnerable to disease, illness and trauma. While medical vaccines help develop immunity against disease, social vaccines develop the ability of communities to resist and change social and economic structures and processes that have a negative impact on health and force governments to intervene and regulate in the interests of community health.

Table 1 provides a comparison of social and medical vaccines. This shows that the equivalent to the administration of a vaccine are processes that raise the consciousness of a community and the individuals within it which leads to resistance to unhealthy policies and practices through political action. This process needs to spread through a population, so that governments and other institutions adopt health promoting social and economic policies and achieve population coverage (like a medical vaccine) in order to be effective. There is no formula for this social and political mobilization and subsequent political

Table 1: Comparison of medical and social vaccine

Medical vaccine	Social vaccine
Administration of vaccine	Raising consciousness about causes of unhealthy conditions and strengthening social mobilization leads to resistance
Raises immunity in individuals—immunity spreads across population resulting in Herd effect	Resilience raised Popular mobilization leads to government action to regulate unhealthy practices and intervene in the interests of community health Spread across population
Necessity to ensure immunity across a high percentage of the population in order to prevent outbreaks	Need to create and maintain sufficient popular mobilization and 'resistance' to unhealthy policies and practices Popular mobilization builds empowerment, and a resultant political accountability and will to take action to promote health The political will for change leads to governments adopting progressive social and economic policies and regulatory mechanism that promote health equitably

uptake of popular demands. It is a dynamic process that reflects and influences the context within which it happens. However, there are some constants. Empowerment is both a personal and a group process which builds collective self-confidence. The process should lead to people shedding feelings of powerlessness and resignation which result, at least in part, from the lack of skills and confidence required to change their condition (Werner and Sanders, 1997). Frequently, this confidence is forged in a common struggle—whether it be against gender or ethnic oppression, economic exploitation, political repression or foreign intervention. As a result of the social vaccine, a population is able to resist unhealthy policies and practices and mobilize and take action to stop threats to health, usually through influencing the development of 'political will' which results in health promoting policies and laws. These threats may be from the socio-economic context (e.g. unfair taxation or labour laws), from social structures (such as race or gender discrimination) unhealthy living and working conditions (inadequate housing, food insecurity; poor transport and a polluted living environment) or the need for accessible, equitable and effective health care (e.g. universal public health system) (Irwin and Scali, 2005; Baum, 2008). We recognize that, unlike medical vaccines, social vaccines are often bi-directional and there is often a dialectic between popular pressure, political will and eventual regulation and intervention.

PRACTICAL EXAMPLES OF SOCIAL VACCINES

Our definition of social vaccine places prime importance on mobilization that results in political commitment to interventions that affect the structures and circumstances within which people live and work and which, over time, have significant effects on health outcomes and their distribution in populations. We provide three examples of instances where popular mobilization followed by political commitment to action on social or economic determinants of health has or has had the potential to improve health.

Land rights and subsistence

In many countries around the world, the Indigenous owners of land have had that land removed through the processes of colonization and industrialization. They have been dispossessed and forced to change from collective patterns of land ownership, which built social capital and minimized inequities, towards patterns of land ownership that are unequal and based on private and individualized forms of ownership. Across the world, the loss of control over land has had a devastating impact on the health of Indigenous peoples. In the words of an Australian Aboriginal leader:

> Our identity as human beings remains tied to our land, to our cultural practices, our systems of authority and social control, our intellectual traditions, our concepts of spirituality, and to our systems of resource ownership and exchange. Destroy this relationship and you damage—sometimes irrevocably—individual human beings and their health (Anderson, 1996).

Combining such perspectives with the insights of the work of Marmot (2004) (concerning the importance to health of control over one's life

trajectory), makes the centrality of land reform evident. Australian Aboriginal people living on their land and with a continuous relationship to it appear to have better physical and mental health (McDermott *et al*., 1998). Land rights movements have been evident around the world and act to empower Indigenous peoples (Burgess and Morrison, 2007) and act as a social vaccine to construct land restitution as an intervention to promote and protect the health of Indigenous peoples.

In many countries, unequal land distribution is aggravated further by changes in farming practice (Chopra, 2005). For example, in India, recently the large numbers of suicides among farmers in India has been linked to unfair agricultural development policies that support cash crops over food crops (Patel, 2001; Suri, 2006). In Kenya, thousands of dairy farmers have been bankrupted as a result of cheap imports of milk products from Europe, resulting from massive subsidies to the European dairy industry, combined with reduced import tariffs necessitated by 'free trade' agreements (Madeley, 2003). Strengthening of farmers' protest movements supported by consumers around the world could create a social vaccine that ultimately could result in political will to ensure agricultural policies aimed primarily at sustaining local livelihoods (rather than producing cash crops through large commercial farming enterprises), the removal of unfair agricultural subsidies to industrial farmers in the North and the use of trade protection measures to protect small farmers in poor countries.

Restriction and regulation of corporate advertising

Many behaviours that result in poor health arise, in part, from unhealthy and unethical advertising campaigns. Cigarette smoking and the displacement of breast milk by infant feeding substitutes are two examples where advertising and marketing have actively encouraged people to adopt unhealthy practices. In both cases, widespread social mobilization (Chapman, 1994; Chapman and Wakefield, 2001) has led to the regulation of advertising through international codes which have helped to protect people from unhealthy practices.

Considerable concern is being expressed in high- and low-income countries about the rising rates of obesity and the increase in chronic disease such as diabetes, cardiovascular disease and joint problems (Gardner and Halweil, 2000). In rich countries, the rising prevalence of obesity in children is of particular concern. Food manufacturers spend massive amounts on advertising food that is often high in fat and sugar. In the UK, for instance, one soft drink manufacturer spent £23 million on advertising in 2002, which is about 10 times the entire national budget for nutritional health promotion (Caraher *et al*., 2005). The advertisements are generally designed to appeal to children, often featuring promotional free toys. Political awareness of this threat and social mobilization against it is increasing, and calls for regulation of the corporate food sector are growing (CFAC, 2008). This is to protect children from this unhealthy marketing by, for example, insisting on correct nutritional messages or banning the advertising of unhealthy food on television when children are most likely to be watching.

Progressive taxation for social security

Poverty and extremely unequal distribution of wealth and income remain the biggest underlying causes of premature morbidity and mortality. They are strongly associated with malnutrition and increased exposure and vulnerability to disease, illness and trauma, and deny billions of people access to health care. In much of the rich world, one of the most significant advances made in promoting good health was the introduction of social protection, often funded through progressive taxation (Navarro *et al*., 2006). These measures came about because of pressure from social movements, especially trade unions, which created a political demand for them. This process of mobilization leading to political will and subsequent taxation reform was an effective social vaccine for those in social democracies (Szreter, 1988). Most low-income countries lack any real prospect of raising adequate public revenue to fund essential social protection. Therefore, a social movement advocating for universal social protection—as recommended by the Commission on the Social Determinant of Health (2008)—could be the first step in developing a social vaccine to secure the political will to implement a global treaty to ensure social protection for all citizens.

CALL FOR RESEARCH INVESTMENT ON SOCIAL VACCINES

We conclude this paper by making a call for more research relevant to social vaccines. Compared with the resources invested in researching vaccines for just a single disease, the investment in research relevant to providing evidence for and testing social vaccines has been minimal (McCoy *et al*., 2004). Yet there is an urgent need to understand what social and political arrangements promote an empowered and resilient population, who are able to recognize threats to health and take action to protect themselves from the threat, and force governments to regulate and intervene. The causal links between structural determinants and health outcomes are complex and embedded in a web of political, economic, environmental and social factors which require research designs that can accommodate this complexity (CSDH, 2008). Research leading to improved understanding of these social and political processes is likely to improve health equity worldwide.

CONCLUSION

This paper has argued that action on the social and economic determinants of health can be advanced by adopting a 'social vaccine' metaphor, which applies the logic of traditional medical vaccines to processes of popular mobilization and the resultant political will that leads to interventions and regulations that protect populations from the structural causes of illness and health inequities. This metaphor has value for the health promotion movement in arguing more effectively to those imbued in the biomedical model for a social determinants perspective on health promotion.

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