THE 'SOCIAL VACCINE'

Reflections on a new metaphor to strengthen policy action on the social determinants of health

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(In Dialogue with
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(Background paper for Double Plenary Session on 'Social Vaccine' at Forum 10 Cairo, 30th October, 2006

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The People's Charter for Health that emerged at the first People's Health Assembly in Savar, Bangladesh, in December 2000, noted that *'inequality, poverty, exploitation, violence and injustice are at the root of ill health and the deaths of the poor and marginalized'.* It also emphasized that *'health is a social, economic and political issue and above all a fundamental human right*'. In its detailed call for action it suggested a six point programme which included:

- **health as a human right;**
- **tackling the broader determinants of health - economic, social and political challenges;**
- **environmental challenges**
- **war, violence, conflict and natural disasters**
- **A people centred health sector**
- **People's participation for a healthy world**

Very significantly, it is the first comprehensive consensus health document that suggests that action for health has to move beyond the biomedical approach focusing on drugs and vaccines to a more comprehensive social approach (1)

The People's Charter for Health echoed and endorsed the Alma Ata Declaration, an earlier global consensus document which in 1978 had also affirmed that '*health is a fundamental human right and that the attainment of the highest possible level of health is a most important world wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector'(2) .*

The importance of action on the social determinants has been suggested in the past by several health professionals and expert committees.

In 1981, the Indian Council of Social Science Research and the Indian Council of Medical Research in their Health for All strategy in India, outlined a prescription for Health for All, which included such a broad concept of health action. They emphasized '*the need for a mass movement to reduce poverty and inequality and to spread education, to organize the poor and underprivileged to fight for their basic rights and to move away from the counter productive consumerist western model of health care and replace it by an alternative based in the community'.(3)*

Echoes of this broader social action are seen in the writings of public health professionals and epidemiologists in the late 1980s. In a detailed epidemiological socio cultural and political analysis of Health and Family Planning Services in India, Professor Banerji noted that: '*Health service development is thus (a) socio-cultural process (b) a political process; and (c) a technological and managerial process, with an epidemiological and sociological perspective'* (4). Extending this idea further, in 1989, Community Health Cell in India proposed a paradigm shift in health action from a biomedical approach to a social, community approach, which also moved focus from *'drugs and vaccines' to education and social processes* (5) It is important to emphasize that a case was being made not for a biomedical versus a community / social model of public health but for the broadening of the orthodox biomedical approach by the inclusion of a social / community / societal dimension.

The late Professor Rose (1992) after decades of extensive epidemiological research wrote that '*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'* (6).

Many researchers have since explored the social factors as determinants of disease. Studies on mental health have shown associations between risk of mental disorders and poverty and also factors such as experience of insecurity and hopelessness, rapid social change and the risks of violence and physical ill-health. (7). Studies have shown gender disadvantage and reproductive health risk as factors for mental disorders in women (8).

Other studies have shown interconnectedness between women's health and life concerns, including physical fatigue and psychological stresses of living in poverty. The studies have suggested that '*economic, social, psychological, and physical determinants come together in women's bodies'*. This study has recorded that "*Women's evocative words underline emotion and its connection to bodily health, emotions that are a lingering response to the horrors of war and a reaction to the daily degradations of poverty*". (9)

2. Recognising social approaches to tackling health challenges and public health problems

In 1998, in a comprehensive public health policy analysis of the problem of tuberculosis and tuberculosis programme in India, Narayan. T, (10-13) suggested different levels of our understanding of the '*determinants of disease*' and hypothesized that '*determinants at different levels needed different levels of solutions and control strategies* (See Table 1).

She emphasized that the recognition of the new and deeper social paradigm would move our understanding of TB beyond vaccine and drug distribution, to include components that enhance awareness, motivation and empowerment of patient through counseling and autonomy building skills. Finally, such a programme would then locate action in a multidimensional and multisectoral mosaic impacting on all aspects of the problem. Without specifically calling it a 'Social Vaccine', it was suggested that the programme would include an increase in health budgets and funds for TB control; poverty alleviation programmes focused on marginalized peoples; housing

and planned urbanization programmes; occupational safety focused on high risk individuals and high risk occupations; personal and social support to affected peoples and their families – particularly those from the marginalized sections; and initiatives to address social and economic inequality and injustice. It was emphasized that such a broad based social societal oriented model of a health programme for tuberculosis would then '*strike at the roots of the problem and not fritter away resources in superficial biomedical reductionist strategies that have a limited impact on the disease' (*11).

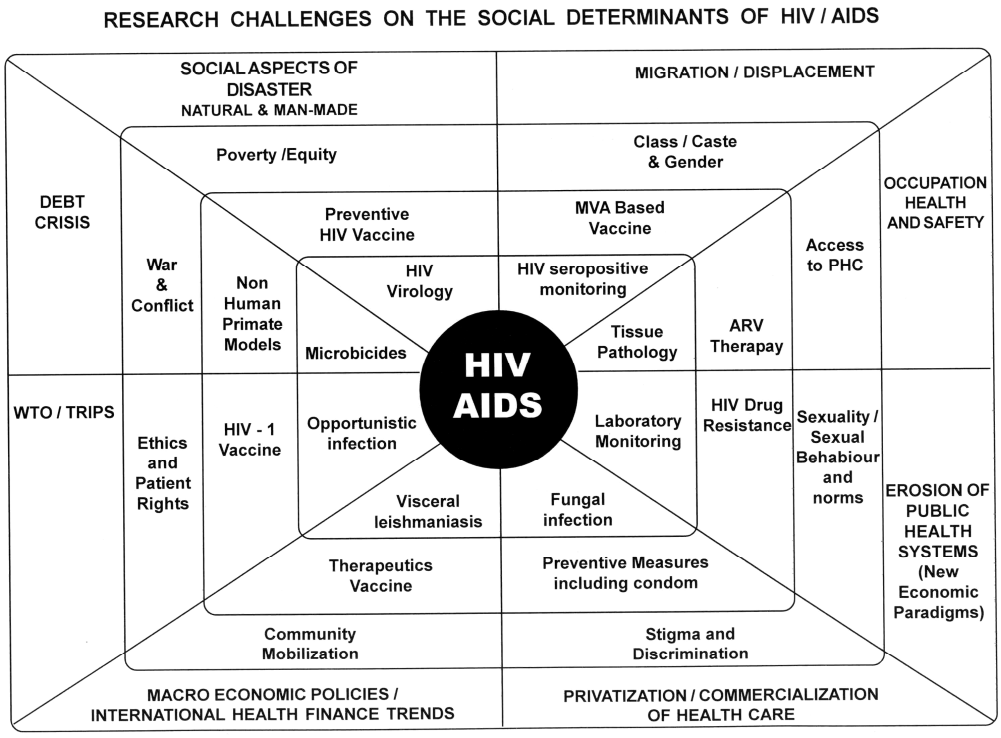
Table 1
Tuberculosis and Society – Levels of Analysis and Solution

Levels of Analysis of Tuberculosis	Causal understanding	Solutions / Control Strategies
Surface phenomenon (medical and public health problem)	Infectious disease / germ theory	BCG, case-finding and domiciliary chemotherapy
Immediate cause	Under-nutrition / low resistance, poor housing, low income / poor purchasing capacity	Development and welfare – income generation / housing
Underlying cause (symptom of inequitable relations)	Poverty / deprivation, unequal access to resources	Land reforms, social movements towards a more egalitarian society.
Basic cause (international problem)	Contradictions and inequalities in socio-economic and political systems at international, national and local levels	More just international relations, trade relations, etc.

Source: Narayan, T. 1998(10)

In a series of annual conferences at Sir Dorabji Tata Centre for Research in Tropical Diseases, Bangalore, researchers have explored the research challenges of social and community determinants of Malaria, Diarrhoea, Acute Respiratory Infections (ARIs) and HIV-AIDS and have recognized that the evidence on these determinants will help to evolve new social and community approaches to tackling these major public health challenges (14-17). In each of these papers, a comprehensive analysis of the social determinants of these diseases has been attempted and it has been suggested that research on these problems should move beyond the biomedical quest of new drugs and vaccines and include social, economic, political and cultural action that may prevent the problem or reduce the incidence. Table 2 summarizes diagrammatically an approach to studying all the determinants at different levels shown in the form of concentric circles, taking the HIV/AIDS paper as the example (17).

Table 2
Research Challenges on the Social Determinants of HIV/AIDS



Source : Narayan, R, et al (17)

In Table 3, three of these papers highlighting the determinants to be researched and the solution and control strategies to be evolved have been summarized. Could some of these strategies constitute a 'Social Vaccine' approach to the problem?

Table 3
Socio-epidemiological analysis of key communicable disease

	Malaria (14)	**Diarrhoea (15)**	**HIV-AIDS (17)**
Determinants To be researched	• **Malariogenic development Migration patterns** • Environmental / Ecological changes • Poverty / inequality community knowledge and attitude • Health care providers (KAP) • 'Resistance'	• Poverty, inequality & social marginalisation • Migration / displacement • Ecologically hazardous and unsustainable development • Development strategies without health impact assessment • Economic policies that downside /	• Poverty / equity class/caste & gender • Access to Primary Health Care • Stigma & discrimination • Sexual behaviour & norms • Social conflicts • Erosion of public health system • Commercialization of health care • Inadequate

	of public health system (system default)	commercialise public health system. • Commercialization of health care including unethical prescribing	occupational health and safety • WTO/TRIPS • Migration & displacement • Natural & man made disasters and debt crisis)
Some solutions / Control strategies **(SOCIAL VACCINES?)**	• **Health impact assessment and response** • **Health care for migrants** • **Eco-sensitive development** • **Poverty alleviation** • **Equity focused health strategies** • **Health education** • **Reforms / strengthening of public health system.**	• Tackle poverty and marginalisation • Poverty alleviation programmes • Environmental and health campaigns • Health impact assessment of development study • Pro-poor economic policies • Countering commercial of other of health care	• Life skill education for youth as healthy and responsible sexuality • Local level peer education for informed and separate discussion on sexuality. • Strengthening primary health care access for women and marginalized sections of social • Community organization and self-help groups to strengthen access and treatment. • Positive people's network to empower, enable and monitor programme.

Source : Narayan, R (14, 15, & 17)

In the latest paper in this series on HIV/AIDS, Narayan. R has specifically noted that '*there is a paradigm shift required to enhance research towards a 'social vaccine' which will be a much more comprehensive response to HIV/AIDS problem'* (17)
In an earlier paper, at the Mexico Forum 8, there had been a plea for a change in the focus of research from biomedical deterministic research to a more participatory social / community research that would focus on education and social processes rather than only drugs and vaccines (see Table 4). It was concluded that '*A social vaccine for AIDS is closer than the AIDS vaccine*' if such a shift in health research could take place (18).

Table 4: The MDGs and the 10/90 gap : a PHM perspective

Approach	Biomedical deterministic research	Participatory social / community research
Focus	Individual	Community
Dimensions	Physical / pathological	Psycho-social, cultural, economic, political
Technology	Drugs / vaccines	Education and social processes
Type of service	Providing / dependence creating / social marketing	Enabling / empowering autonomy building
Link with people	Patient as passive beneficiary	Community as active participant
Research	Molecular biology Pharmaco-therapeutics Clinical epidemiology	Social-epidemiology Social determinants Health systems Social policy

Source: Narayan. R (15)

It was emphasized that this paradigm shift also require new partnerships between medical / laboratory researcher and public health researcher / activist. The quest for the social vaccine arising out of research activities in this new paradigm is an exciting prospect for the future.

3. The concept of a 'Social Vaccine' and its future (19)

Origins

Though the origins of the 'social vaccine' concept is not clear, its use can be traced back to the counselling and psychological studies stream. The California Task Force to Promote Self-Esteem (1990) described 'self esteem' as a *social vaccine or a dimension of personality that empowered people and inoculated them against a wide spectrum of self-defeating and socially undesirable behaviour(20)*.

The concept of 'social vaccine' was also used in other areas like de-addiction and control of addictive substances like tobacco and drugs. Public opinion was seen as a *powerful social vaccine that effectively precludes certain behaviours* in the fight against tobacco and drugs. (21)

HIV/AIDS

In the field of HIV/AIDS, the 'social vaccine' concept came to be used in the 1990s where it referred to a *comprehensive package of preventive education, promotion of contraceptive use and edification of communities*. This approach was used in Thailand to suppress HIV infection rates and was cited as a model to be emulated (22).

However, the concept of 'social vaccine' was variably used even in the field of HIV/AIDS. It varied from using it to refer to prominent personalities and traditional leaders interacting with people 'dying of AIDS' (23) to 'prevention and control' (24) to 'sex education' (25) to 'education' in general (26) to 'multi-dimensional response'

involving elements such as 'preventing social exclusion, protecting incomes and social security schemes, and promoting solidarity with people with AIDS.' (27)

Education and Social Vaccine

There are two issues here—one is the use of 'education' as social vaccine, and the second is the use of social vaccine in educational settings like the use of school-based risk reduction strategies. The spectrum of use of the former varies from 'sex education' (25) to 'life-skills training' (17) to 'use of education as an empowerment and developmental tool' (26). The latter has also been studied in detail and various institutions and education systems have come up with packages to deal with the issue.

Social Vaccine as a 'Vaccine'

The social vaccine can be both a metaphor and a 'real entity'. This dimension was reviewed in an interesting paper, which uses the framework of clinical vaccine development, use, effectiveness and evaluation to examine the 'social vaccine' construct. The author calls on social sector policy makers and planners to learn from vaccine developers and makes a few recommendations drawn from his observations of vaccine development. They include: increasing investment in good quality social science/education research; developing an assessment methodology and a more comprehensive means of reporting on HIV prevention; applying cost-effectiveness analysis for social/education HIV/AIDS interventions; strengthening the quality and coverage of delivery systems; maximizing HIV prevention coverage of target populations (28).

The ILO and 'Social Vaccine'

The ILO's work on social vaccine was scaled up after the Regional Tripartite workshop organized by ILO and UNAIDS in Windhoek, Namibia, in October 1999. The workshop noted HIV/AIDS as '*the most serious social, labour and humanitarian challenge that is currently threatening every African country's economy; a developmental crisis, causing discrimination in employment and the social exclusion of People Living With HIV/AIDS (PLWHA); a scourge that brings additional distortion to gender inequalities, and increases the numbers of orphans and incidences of child labour'*. It advocated for a '*social vaccine*' that promoted social inclusion, solidarity, and income and job security (29).

The Future of 'Social Vaccine'

The wide spectrum of the use of the term 'social vaccine' and its adoption at the highest levels of social action reflects the potential use of this construct. However, the inability of the 'social vaccine' concept to become more wide-spread in its use and impact points to some basic structural deficiencies in its construct as well.

Examining the usage of the concept mentioned earlier, we can draw a few observations about the construct of the term 'social vaccine':

- The usage of the term 'social' in almost all the cases mentioned above are limited to the basic understanding of 'social' as 'living together in communities', and tries to make use of that aspect in its intervention.

- The interventions concentrate too much on the behavioral aspects and try to make use of the 'society' in either changing the individual's behavior, or work towards changing the existing social norms, fighting stigma, etc. Not enough emphasis has been put on health and social policy levels of such change.
- Interventions like those of UNESCO and ILO try to address the broader issues involved, but they are still limited to interventions in and around the arena of HIV/AIDS. It fails to recognize or tackle these broader social determinants as factors that affect the spread of most diseases and are crucial to the continuing ill-health of the poor and marginalized in every community.
- A major problem in public health responses today is the verticalisation of interventions often to the detriment of other issues being tackled in the health field. The interventions listed above also fall into the same trap by focusing solely on the control of one problem while ignoring all other related health issues. Social vaccines need to be constructed as a vaccine for protecting society against a large number of problems simultaneously – a systemic response, not a vertical 'magic bullet' response!
- Many of these interventions also follow the cause-effect model and find an intervention that tackles the immediate cause of the disease or problem, but does not bring about a long-term solution. Social vaccine can be more effective, if they focus on the deeper determinant.

While these are a few challenges that may affect the long-term viability of the social vaccine, the interventions listed above are certainly a vast improvement over the usual interventions that tackle health issues purely from a bio-medical framework.

4. The research agenda towards the study of social vaccine

The Special Plenary at Forum 10 will look at the concept and construct of 'social vaccine' beyond the HIV/AIDS focus to other health challenges as well. This includes other communicable diseases like TB & malaria, and social determinants like gender, disability, war & conflict, mental health, childhood, malnutrition, and social exclusion. The panelists and respondents and contributors from the floor will help to evolve the Research agenda to take this concept of the 'social vaccine' forward. This section of the paper will evolve by the end of the Special Session incorporating all the ideas and suggestions during the presentation of the paper and discussion.

Finally, to summaries this short review on the 'social vaccine' concept, one could conclude with an evolving definition:

> *"A social vaccine can be defined as, 'actions that address social determinants and social inequities in society, which act as a precursor to the public health problem being addressed'. While the social vaccine cannot be specific to any disease or problem, it can be adapted as an intervention for any public health response. The aim of the social vaccine is to promote equity and social justice that will inoculate the society through action on social determinants of health"(19).*

Two developments in the 21st century are important for further development of a concept of 'social vaccine'. The first is the People's Charter for Health (1) which was

a civil society consensus on action towards a series of health and social policy issues, which can be constructed as 'social vaccines'. The second has been the launch of the WHO Commission on Social Determinants on Health (CSDH), which is now bringing together all the evidence that will help us understand the need for 'social vaccines' even more. The commission has to be challenged to move beyond collecting 'evidence for social determinants', which is a very significant and important step itself, but also to use this opportunity of the dialogue between the commissioners, the knowledge networks, the facilitators of the civil society evidence and others, as stimulus for evolving action on these social determinants as a 'social vaccine' construct. As Prof. Fran Baum has noted, '*if the People's Health Movement and the CSDH are successful in picking up the baton from the earlier Health for All 2000 movement they may form the vanguard of a successful movement for a socially just and healthier world in which policy decisions are driven primarily by this vision (Health for All) rather than by decisions that maximize profit for a small elite* (30). The concept of a 'social vaccine' or 'a set of social vaccines' at the core of such a movement may just be the idea which captures the imagination and energy of the World Health Organization and the global network of researchers to make this happen. We hope the Session at Forum 10 helps towards this paradigm shift.

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