

Full Length Research Paper

Conceptual Frameworks and Operational Issues in Understanding Health Determinants

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Health is determined by many factors ranging from one's immediate physical-psycho-socio environment to the political milieu of the society that an individual lives in. When we look through the biomedical paradigm of health, disease could be explained through a set of micro-level physiological, bio-chemical and pathological changes in the body which are triggered by internal or external environment. When we broaden the horizon and contextualize health through social medicine paradigm, the whole gamut of constellation of macro level determinants also known as social determinants of health come to the fore. The Social determinants are generally outside the realm of individual control for example, the politics, policies, International agreements like General Agreement on Tariffs and Trade (GATTs), Trade-Related Aspects of Intellectual Property Rights (TRIPS), KYOTO protocol etc affect health so also national upheavals like civil wars, communalism, fundamentalism within the country, all of which effect health. This paper tries to drive home the point that while all determinants of health have their own importance, however it is important that we prioritize determinants as actionable and explanatory determinants. Actionable determinants are those predictors of health that easily lend themselves to direct action. Explanatory determinants are factors or philosophies or models that help us in further understanding health as theoretical construct. Innovative efforts need to be made to convert more and more explanatory health determinants into the ambit of actionable health determinants to evolve innovative interventions to demonstrate that action on social determinants of health is feasible.

Key words: Social determinants, causation, risk factor.

INTRODUCTION

Understanding determinants the health broadly serves two purposes, firstly to identify variables that can be acted upon to modify the factor so as to either eliminate or reduce its impact on the health. Second purpose is it helps in deepening our scholastic understanding of the health within the web of interdependent network of factors that influence one another either serially or in parallel to have direct or indirect bearing on health.

Different health professionals concentrate their attention and work at different levels of health determinants. While Clinicians concentrate on the micro level determinants, public health professionals expand it to a much larger array determinant that come into play while dealing with the disease at community level. Social medicine and Community health activism has helped further the expansion and extension of health

determinants into all inclusive developmental models. This expanded understanding encompasses more wider expanse of Political, social and economic domain, emphasizing on the fact that health is not only a benefit of development, but also indispensable to development (Commission on Macroeconomics and Health, 2001).

The search for causes is an important enquiry in health and so also understanding the determinants of health. The more we look for the determinants, the more exhaustive it turns out to be. When we undertake a root cause analysis of health, we start finding the causes/determinants of health. This exercise can be carried on to any length and depth, even to infinity (theoretical possibility) because the more layers we uncover, the more causes and determinants we "discover". Broadly speaking there are two types of

causes:

1. Proximal causes: they are the causal or/risk factor (which have direct causal association with the given health problem).
2. Distal causes: they can be otherwise termed social determinants of health (SDH), which have indirect relationship with given health problem. While SDH in themselves may not have capacity to cause the health problem, they very often are found to be covariant with the proximal causes that is, any variations in distal causes (SDH) in turn causes variations in proximal causes which in turn have direct effect on health. To borrow Geoffrey Rose's term, we need to examine these causes (Rose, 1992).

The social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices. The social determinants of health are largely responsible for health inequities; the unfair and avoidable differences in health status seen within and responding to increasing concern about these persisting and widening inequities (Social determinants of Health, Available at http://www.who.int/social_determinants/en/).

In 2005, World Health Organization (WHO) established the Commission on Social Determinants of Health (CSDH), on the premise that action on SDH is the fairest and most effective way to improve health for all people and reduce health inequalities. Central to the Commission's remit is the promotion of health equity which is defined in the literature as "the absence of disparities in health (and in its key social determinants) that are systematically associated with social advantage/disadvantage" (Labonté and Schrecker, 2007). This special commission on SDH warranted as the greatest share of health problems is attributable to the social conditions in which people live and work, and is referred to as the social determinants of health (SDH) (Irwin et al., 2006).

SOCIAL DETERMINANTS OF HEALTH (SDH): THE PUBLIC HEALTH PRACTITIONER'S DILEMMAS

As a public health manager or administrator, one is expected to undertake specific control and preventive measure and show specific health impact. Most of the disease control programmes have internationally agreed with health goals that are mandatorily accompanied with predetermined definite monitoring and evaluating indicators. The progress and the performance of public health manager or performance in health by a given country is assessed based on achieving those

predetermined targets. Examples of achieving such targets in the fixed time frames can be witnessed in disease control programmes for Tuberculosis (TB), Acquired immune deficiency syndrome (AIDS) control programmes. The same is even extended to internationally agreed Millennium Development Goals (MDGs). Unfortunately, all the indicators are directed either on the proximal causes or on the programmatic/operational indicators, all of which have direct association with a given health problem. All the activities undertaken in implementation of health programmes are expected to have a definable and measurable impact on the health outcomes.

However, SDH in contrast poses major challenge to the public health practitioners. While the pivotal role played by SDH in the dynamics of health and well being is indisputable, its translation into programmatic framework for specific time bound action and outcomes are a real challenge. The SDH certainly throws open an exciting array of possibilities and definitely help in further understanding the epistemology of health which are of scholarly interest. However, at the same time, ever expanding list of determinant of health baffles the health programme manager. A programme manager in health is hardly interested in academic understanding of a concept and rather looks for actionable information and solutions. However in spite of its complexities, SDH cannot be ignored.

Social determinants of health (SDH) need to be addressed earnestly for the following reasons

1. Good medical care is vital but unless the root social causes that undermine people's health are addressed, the opportunity for well being will not be achieved;
2. Social conditions powerfully influence both the onset and response to treatment of the major infectious diseases that kill (Michael, 2005);
- 3 Recent reviews by Bates et al. (2004a, b) of research on HIV/AIDS, tuberculosis and malaria, communicable diseases that together account for almost six million deaths per year, identify poverty, gender inequality, development policy and health sector 'reforms' that involve user fees and reduced access to care as contributors to ill health (Labonté and Schrecker, 2007);
4. Last but not the least, the major causes of mortality; cancer and cardiovascular diseases, will not be solved through medical interventions. Medical institutions take care of individuals with these conditions and improve their quality of life but they do not resolve these (or most other) chronic problems. Disease prevention and health promotion programs primarily based on behavioral and lifestyle interventions are also insufficient.

There is plenty of evidence that programs aimed at changing individual behavior have limited effectiveness. Instead, there is need to broaden health strategies to

include political, economic, social, and cultural interventions that touch on the social (as distinct from the individual) determinants of health. These interventions should have the empowerment of people as their first objective. Thus, a national health policy should focus on the structural determinants of health and should have as its primary components political, economic, social, and cultural health policy interventions, focusing on (a) public policy to encourage participation and influence in society, (b) economic and social determinants, (c) cultural determinants, (d) working life interventions, (e) environmental and consumer protection interventions, (f) secure and favorable conditions during childhood and adolescence and during retirement, and (g) health care interventions that promote health (Vicente, 2009).

Root cause analysis of health: Conceptual depth versus operational feasibility

The search for causes of health problems for its remedial action in itself has been one of the primary pre-occupation of health care workers right from the beginning of history of medicine. This excavation and exploration of root cause analysis takes us through various layers of a very broad spectrum of causes and determinants. The determinants identified thus have varied practical utility and interest to diverse range of health care workers from the point of view of taking action. The search takes us through various layers.

First layer: Physician/health manager's delight

When one starts digging for finding causes of any given health problem, one comes across various layers. It will be a very rewarding experience at the first layer, since it digs out the most proximal causes of the given health problem for example, bacteria, nutrition deficiency. This layer is health manager/treating physicians delight because he gets introduced to immediate causes that are responsible for the health problem where he can intervene in them and fix the problem. Results are there to be seen.

Second layer: Health researcher's delight

If the root cause analysis is taken to the second layer, one finds second set of causes, this is the layer of public health researcher's (with biomedical paradigm) delight. In this layer, additional set of proximal causes are unearthed which were not previously known but they are all verifiable by a set of valid experiments for example, housing, sanitation, hygiene, safe water supply, waste disposal, occupation etc.

Third layer: Community health physician's delight

This occurs when the root cause analysis is carried out to the third layer. This is the layer where distal causes start. In this layer, we unearth the social determinants of health-political, social, economic, cultural effects etc. This layer is community physician's delight (with social medicine paradigm). In this layer, happenings in the health can be explained by the political, social, economic, and environmental factors. The relationship between these determinants and the health problems are intuitively understood and to a great extent demonstrable by showing comparisons across regions adopting ecological study approaches for example, health inequalities to social, gender, economic status etc. Generally in Health field, majority of the health professionals are comfortable only venturing up to the third layer because one can intuitively understand the causal relationship between health and its proximal and distal causes. Most importantly, they are comfortable in the first three layers because they can do something practical at individual level to alleviate the suffering of people in various capacities as demonstrated in the first layer (as physician/health manager), in second layer (as health researcher) and in third layer (as community physician/health activist).

Fourth layer: Health philosopher's delight

Now if one digs further into finding root cause analysis, one reaches the fourth layer. This layer is a health philosophers' delight because in this layer, health is contextualized in larger political economy and ideology. To tread through this layer, it is imperative that one needs to have domain knowledge that lay outside the ambit of health. Health determinants derived from this layer are generally beyond one's easy or unassisted comprehension because to make sense of determinants of health unearthed in this layer, one has to piggy back on certain political philosophy or ideology for example, socialism, communism, capitalism and liberalism. One is forced to choose between left, right or centre ideologies from the political spectrum.

At this point, any one has to make a choice either to embrace the new domain's political philosophy/ideology or continue exploration without which one will not understand the connection between the determinants in the fourth layer and Health. The politico-ideological language in which broader health determinants are being discussed in this layer are beyond comprehension of one's uninitiated mind which has not been exposed to any political philosophy or ideology. One would invariably be confused, as the language spoken is different, the paradigm itself is very different. In this layer one needs to understand communist or socialistic ideology to understand their analysis of determinants of health. In summary, as the cliché goes, be a Roman when in Rome

that is, understand leftist ideology first to understand their analysis of determinants of health in the fourth layer.

For example complex theoretical and conceptual framework have been developed specifically for analyzing different pathways by Diderichsen et al. (2001) to theorize impact of globalization on health by identifying "four main mechanisms; social stratification, differential exposure, differential susceptibility and differential consequences that play a role in generating health inequities. "Global is said to affect health outcomes by way of each of these mechanisms and the authors' reference to the influence on stratification of "those central engines in society that generate and distribute power, wealth and risks" (Labonté and Schrecker, 2007).

Incidentally, the determinants encountered in the fourth layer also happen to be the most debated and controversial as they stem out inherently from political analysis. There is a great deal of dogmatic dispute about the rights and wrongs of economic and social policies. People use labels; globalization, neoliberal economic policies as badges of allegiance and terms of use and abuse. This fluidity and variability is expected as the linkage between determinants, and health is extremely difficult by the conventional research methods (Michael, 2005).

IS THERE A BOUNDARY BETWEEN HEALTH AND POLITICS?

SDH inherently being political in nature becomes imperative to look at health through broader perspective of political philosophy, ideology and epistemology. When health is explored in the context of SDH, the boundary lines between health and politics appear to be blurred or altogether non-existent because one is already understood to have embraced certain political philosophy/ideology. One is seen to have begun the journey onto the new path piggy back on one's chosen political philosophy and ideology. At this stage, one invariably appears to have drifted subconsciously into an entirely new domain where one is trying to redefine the entire concept of health from one's new found political philosophical/ideology of the domain one has chosen. That is probably one of the reasons that can explain difference of opinion and lack of consensus between health determinants debate carried out from different philosophical and ideological perspectives. The differences are bound to be there as the paradigms and frame work of analysis are very different from each other.

For this very reason, most of the health professionals find it uncomfortable to go beyond third level of root cause analysis of health. It is understandable as their rigid biomedical paradigm based training has hardly exposed them to broader understanding of health and they find themselves bewildered in dealing with larger global social determinants of Health. They are happy at first level because it gives them actionable causes. They

are happy at the second level as it gives them more research and insight into something doable. With these two levels they are happy for their ability to take action and give relief to the suffering individual/community. They are willing to venture deep into third layer, as it is here that they gain knowledge of determinants of health due to politics, economics and cultural practices that affect health. However, they are less happy here because there is not much that can be done about those global determinants directly but still, it some action option is open in terms of donning a community health activist role and start fighting for suffering community, hence there appears to be a scope for direct action again.

There also appears conscious decision of few not to enter the fourth layer because it does not give them any tangible tool in hand to help directly address the health problem at hand. It may only help them to analyze and contextualize the problem into their respective political understanding, however they may not help them offer any remedy to mitigate the problem. Many dimensions and manifestations of globalization that are not at first glance economic in nature are nevertheless best explained with reference to their connections to the global marketplace and to the interests of particular powerful actors in that marketplace. For example, the globalization of culture is inseparable from, and in many instances driven by the emergence of a network of transnational mass media corporations that dominate not only distribution but also content provision through the allied sports, cultural and consumer product industries (Labonté and Schrecker, 2007).

The other major challenge faced in such global analysis is that it is very dialectic deteriorations in health status or increases in health disparities. This argument is implicit in a widely cited article claiming that "Globalization is good for your health, mostly" (Feachem, 2001) and was stated explicitly by a team of World Bank economists with respect to the transition economies of the former Soviet bloc (Adeyi et al., 1997). However, the empirical uncertainties associated with this position lead Angus Deaton, one of the leading researchers on the relationship between economic growth and health, to warn flatly that "economic growth by itself will not be enough to improve population health (Labonté and Schrecker, 2007) and is not verifiable empirically. A choice made about the approach to improving SDH is the one that will maximize economic growth in the countries or regions of concern, even at the cost of substantial short-term setbacks.

Classification of health determinants: The pragmatic approach for prioritization

While all determinants of health have their own importance, it would be helpful to prioritize determinants as "Actionable determinants" on their ability to lend themselves to direct action and "Explanatory

determinants”, those determinants that help further scholastic understanding of health as theoretical constructs. Such differentiation would help us to understand nuances of health through well founded theoretical base which in turn is rooted into solid academic understanding. The explanatory approach adopted is congruent with recent reviews of research on HIV/AIDS, tuberculosis and malaria (Bates et al., 2004a, b) which concluded that vulnerability to all the three diseases are closely linked; that poverty, gender inequality, development policy and health sector 'reforms' that involve user fees and reduced access to care are important determinants of vulnerability and that "complicated interactions between these factors, many of which lie outside the health sector, make unraveling of their individual roles and therefore appropriate targeting of interventions difficult" (Labonté and Schrecker, 2007).

Although there have been some attempts to take action on SDH, a review of policies in European countries identified several that took action on the social determinants of health (Crombie et al., 2004). However, these actions by their very nature turn out to be generic to ascertain any direct health impact as shown in the review, although the reason for the policies was not necessarily to improve health, however they were nevertheless relevant to health, taxation and tax credits, old-age pensions, sickness or rehabilitation benefits, maternity or child benefits, employment benefits, housing policies, labour markets, communities and care facilities (Michael, 2005).

CONCLUSION

The search for health determinants should be carried on earnestly to gain holistic understanding of health in its broader context. For operational ease, determinants need to broadly be demarcated into “actionable and explanatory determinants”. Innovative efforts need to be made to convert more and more explanatory health determinants into the ambit of actionable health determinants. There is urgent need to evolve innovative interventions to demonstrate that action on social determinants of health is feasible.

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