

Role of Ideas and Ideologies in Evidence-Based Health Policy

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Abstract

Policy making in health is largely thought to be driven by three 'I's namely ideas, interests and institutions. Recent years have seen a shift in approach with increasing reliance being placed on role of evidence for policy making. The present article ascertains the role of ideas and ideologies in shaping evidence which is used to aid in policy decisions. The article discusses different theories of research-policy interface and the relative freedom of research-based evidence from the influence of ideas. Examples from developed and developed countries are cited to illustrate the contentions made. The article highlights the complexity of the process of evidence-based policy making, in a world driven by existing political, social and cultural ideologies. Consideration of this knowledge is paramount where more efforts are being made to bridge the gap between the 'two worlds' of researchers and policy makers to make evidence-based policy as also for policy analysts.

Keywords: Health policy, Research, Evidence-based policy, Ideas, Ideology

Introduction

Public health researchers and policy makers are increasingly bridging the gap between the apparently 'two worlds', especially with the advent of evidence-based policy making (1). However, Bowen et al maintain that the pathway of diffusion of evidence to policy is dependent on different capabilities at individual, organization and system level (2). One of the key factors which determine success of evidence in making impact on policy i.e. evidence based policy making, is prevailing ideas and ideologies. The present article outlines what constitutes evidence for policy making and the extent to which research is oriented to policy needs (section 1). Second section is devoted to description of the theories of ideas and ideology followed by the diffusion of innovation for policymaking. Problems encountered in generation of evidence and its interpretation as a result of prevailing ideologies are discussed subsequently using illustrative examples from both developing country (3) (India) and developed countries (4-7) (UK and the Netherlands) setting. The article highlights the importance of understanding how evidence is generated and interpreted in light of concurrent social and political ideology.

Evidence

What constitutes evidence in policy making?

A wide variety of information constitutes 'evidence' in policy making which ranges from evidence generated from research to knowledge and information generated from consultative process or published documents or reports. Evidence may also be generated from ideas or interests or 'expert knowledge' of individuals, groups or networks; and evidence borne out of economic analyses or political information relevant to agenda of government (2). To limit focus, the present essay narrows its discussion in the subsequent text to evidence generated from research.

Bringing research closer to policy making

A review of articles published in three leading high impact journals of epidemiology (namely *Annals of Epidemiology*, *American Journal of Epidemiology* and *Epidemiology*) from 1990-95 concluded the low policy implications of research conducted by public health researchers (8). Overall, only 23% articles had some policy implications, with majority directed towards clinical or public health practice, and a meager 1.3% research bearing some recommendations for re-

gulatory/legislative policymaking. Another review which studied the distribution of types of 4876 health research and articles published from a developing country (India) in 2002 and indexed in PubMed, showed health policy/systems continued to be a neglected field with only 1.9% of total articles (9). In such a situation, it is not unwise to conclude that researchers and policy makers continue to remain in their 'two worlds' with different work, attitudes to research, priorities, accountability issues at stake, organizational constraints and values. These factors make it difficult altogether for even this little policy-oriented research to percolate effectively and contribute in evidence-based policymaking.

Recent years have seen a greater interest in evidence-based policy making at least in the developed countries, with a shift from problem-solving model (which visualized a rational and sequential relation of research and policy) and enlightenment model (cumulative, indirect impact of research) towards an 'elective affinity model' (10). The latter model holds that evidence is more likely to find a way to policy making if it fits into the ideological frame of policy maker for the problem and is determined by the extent of contact between researchers and policy makers. Thus, this model brings to focus the impact of ideas and ideologies in success of evidence based policymaking. The elective affinity model is a less cynical view of evidence-based policymaking than the 'strategic model', which simply considers research or evidence as purely political instrument used by government to put forth their agenda (10).

Ideas and Ideology

Ideas and ideologies are a major determinant for consideration of evidence for policy. Ideas shape one's belief systems. One of the policy models, Advocacy Coalition Model, is particularly useful to illustrate this point (11). This model emphasizes that each policy sub-system has actors who form coalitions based on certain ideologies and ideas. Instead of positioning researchers and policy makers against each other in two separate worlds, advocacy coalitions consist of politicians,

bureaucrats, social scientists, researchers, and others with similar beliefs and ideologies in each group. These beliefs or ideas which hold these actors together are structured at three levels in increasing order of susceptibility to change with new evidence i.e. deep core (which is reflective of person's underlying philosophy); a policy core which is the position a person takes to maintain deep core; and secondary aspects which comprise a range of decisions to implement policy core. To illustrate the point, example of market-oriented reforms in health can be taken. A deep core of "State is an inefficient mechanism of resource allocation" drives the neo-liberal ideology. A 'policy core' is adopted which maintains that the functions of various actors need to be redefined for health care financing and delivery. It further believes that State should be involved in a stewardship role rather than active provision of health care. Lastly, the secondary aspects are instruments used to maintain the policy core. This would entail introducing internal market reforms such as introduction of demand-side cost sharing; greater role of private sector in delivery of health care; and institutionalizing performance measurement standards in public sector. Evidence can affect the structural core easily but it requires events which are external to policy subsystem to change the deep core. Together these two bring about policy change. In context of particular example it would mean that neo-liberals would be hard to change their stance on the 'deep core' i.e. state is an inefficient mechanism of resource allocation. However, based on evidence that demand-side cost sharing is a regressive means of financing, they will be ready to consider protection mechanisms such as exemptions for below poverty line household from user charges. Election of a social-democrat government could serve as an 'External event' responsible for affecting the structural core.

Role of frames in shaping evidence

Ideas are concerned with way a given policy problem is perceived. Cognitive scientists contend that only information, which fits into the mental frame of problem, is likely to be accepted.

Evidence that does not fit the frame is likely to be rejected with the frame staying in place. 'Framing' concerns the use of language in such a way that the piece of evidence is in harmony with one's view (12). The real issue is not limited to use of language. Language is not the prime mover of evidence; rather it is the 'idea' put forth by language is what matters!

It is also a general notion that what type of evidence is superior to the other. Medical or biological evidence, however debatable, scores over evidence generated through social sciences. This implies that biomedical evidence fits into the ideological frame of policy-makers much more than sociological evidence. From our perspective, any evidence emanating from laboratory-based research constitutes 'biomedical evidence', whereas behavioral, sociological, or ethnographic studies produce sociological evidence. This also explains how over the years medical associations have been able to achieve their voice heard in the policy echelons.

Impact of ideas and ideologies in shaping research and evidence: Diffusion of evidence theory

Diffusion of innovation answers the questions as to what individual and organizational factors influence the likelihood of an innovation to pass through the cycle of adoption, adaptation, and action to become a policy and its subsequent implementation (2). It also answers the intricate puzzle of differing organizational values and norms, which determine the responses towards an innovation. The extent to which these factors influence the actual determination of policy is however, an under-researched area and literature is limited (10, 13). Values are of paramount importance here. Cigarette smoking is known to have an inverse association with the level of taxes, especially on poor and teenagers. However, in order to act considering this evidence, would require the political ideology of the 'role of state' in public lives. Those who are against the ideology of 'nanny state' would reject the idea of banning consumption of tobacco and would argue that it is undemocratic to influence behaviors people choose as this would constitute infringement to individ-

ual freedom to choose. They would argue that cigarette smoking is a behavior, which is totally under "individual" control. Policy planners and politicians who believe that cigarette smoking is not entirely an individual decision and is rather heavily determined by the socio-cultural milieu which is further defined by media and advertising are likely to have 'nanny state' fitting into their frame of mind. This group of policy makers is then likely to accept the evidence, which reveals high level of reductions in cigarette smoking following rise in taxes, due to higher price elasticity of cigarette smoking for poor and teenagers. They are more likely to buy the idea that this legislation once enacted would reduce prevalence of cigarette smoking, and that a small nudge by the State will not infringe into freedom of choice of citizens.

Kings Fund (UK) in its report 'Finding out What Works' reviewed the Government's investments and the extent of use of evidence in decisions to make these investments (4). The Report concluded that programs were largely driven by "informed guesswork, expert hunches, political and other imperatives". These hunches and political imperatives are reflective of political ideologies. Factors which were cited to prevent use of evidence for policy making included lack of quality evidence, difficulty to apply evidence, and organizational and resource constraints for application. Black Report provided substantive evidence of existence of health inequalities and measures to correct them (5). However, the Conservative Government of the time did not consider the report, which did not fit into their political ideology. Years later, 'Independent Enquiry into Inequalities in Health Report' largely drove policy actions (6). This highlights the point that it is the existing political ideology, which determines the likelihood of acceptance of evidence rather than its mere scientific quality.

An interesting example can be drawn from Anti-tobacco legislation enacted recently in India (14). Tobacco consumption in various forms i.e. smoking, chewing, snuffing etc has been a major problem in different parts of India. Lot of research evidence was available citing the odds of

mortality and different morbidities caused by consumption of tobacco. However, the frame of policy makers and political leaders was that “tobacco is a killer”. It kills human beings and this makes it a societal abuse. The evidence available until date did not document how many people in terms of absolute numbers are affected in terms of mortality and morbidity considering India’s population. This was the time when research designed with ‘number of people dying with mortality associated with smoking’ as the end-point projected, that smoking will cause 930,000 deaths in India in 2010 (3). This evidence matched with the frame of mind created by ideology, and was thus readily accepted. This illustration is not to underestimate the heavy influence of political will to undertake action, which was present at highest level at time of enactment of the legislation. However, the existence of ‘political will’ itself is another reflection of prevailing political ideology and political agenda.

Ideology does not merely affect the way evidence is received in policy circles, and the extent to which it is used for policymaking. Rather, ideologies affect each step of research, which leads to generation until final publication, and dissemination of evidence (Table 1). Trials conducted using large sample sizes can be used to project significant differences for small effect. Importance of timing for conduction and publication

research can be ascertained from the influential paper on Iraq war casualty, which was published in Lancet just around the time of US Presidential election in 2004 in which Iraq war, was a central issue (14). Ideas, which are promoted by funding organizations, are generally the ones, which draw maximum funding for research. This can be seen in the present context where the ideology that HIV/AIDS is a global epidemic continues to draw large chunk of research resources compared to many other competing issues of importance which may have a severe impact on public health i.e. diarrhea, pneumonia and road traffic accidents (15). This is again because HIV/AIDS continues to fit in the frame of idea in mind of those who decide funding. Another example could be the research into alternate mechanism of financing health care involving community/private sector in health care delivery, which matches the market-based World Bank ideology, finds much favor in being funded by the same organization than many other research topics which focus on strengthening of public health care infrastructure. Government of India commissioned major studies on public health restructuring in 1990s, which saw a shift in global ideology towards market liberalization (16). These studies besides suggesting strengthening in public health infrastructure highlight role of alternate financing mechanisms and private sector in service delivery.

Table 1: Levels and mechanism of impact of ideas and ideology on different stages of evidence generation and utilization

Stage of research	Role of ideas/ ideology in shaping the research
Selection of research topic	Priorities for research determined by ideas
Design phase of research	Setting of study endpoints which make them fit the frame Inclusion and exclusion criteria to suit the idea under consideration Sample size determination Timing of research
Implementation	Timing of research Changes during implementation to alter study design Perform multicentre trials and present results from centres with favourable results Non-inferiority trials against superiority trials
Analysis or interpretation	Use multiple endpoints and choose one which fits frame Subgroup analyses and present one which is most concurrent with frame of idea
Publication/ dissemination	Research which fits the ideology gets preference for publication
Acceptance of research	Research which fits the ‘frame’ is accepted Other constraints which limit acceptance

Another example elucidates the role of ideas and ideology in shaping evidence (17). The Netherlands is a country where one thirds of the births are delivered at home. Midwives conduct 71% of these home births, and overall contribute to 48% of all Dutch births. This was the Dutch way of births. The health insurance system encouraged pregnant women to deliver at home, where well-qualified midwives were available, following which there was well-organized post-partum care. Two schools of thought and ideologies regarding the correct place of birth (home versus institution) existed in the country, which used research to generate evidence in their favor in different ways. However, to do research for maternal mortality following the two methods of delivery required large sample size of maternal deaths to provide the correct power for study, which was not possible due to an overall lower maternal mortality rates. This necessitated use of alternative study designs, which included either use of existing statistics, or design large scale prospective, studies or use alternative outcomes which are capable of detecting small differences allowing for lower sample sizes. Thus, the ideologies supporting different setting of child-birth were driving different stages of generation of evidence. Using existing statistics, research produced by scientists promoting home birth concluded that perinatal mortality of hospital and home deliveries declined by half and one-third respectively between 1953 and 1970 which strengthens claim for home delivery as a safe mode. On the contrary, proponents of the institutional delivery ideology, concluded from their research around the same time that provinces with highest rates of hospitalized deliveries had the lowest rates of perinatal death. Thus, ideology was driving evidence generation to support their frame of mind.

Using prospective studies, pro home-based birth scientists concluded that perinatal survival is better than the institution deliveries. Evidence generated by these prospective studies was particularly used by Dutch Government to promote home births as the methods of delivering, and thus promoting their ideology.

Again, not satisfied with the Dutch Government's response to their evidence, anti-home birth coalition of scientists reconciled that evidence of maternal or child mortality would not be the right indicator to prove superiority of their approach. They devised another indicator i.e. cord blood pH to document childhood acidosis (morbidity) progressing to neurological complications among children. Despite having produced evidence against home-based births, they were not able to achieve anything at policy level. This case study illustrates the role of ideas in formulating, conducting, and interpretation of research.

Conclusion

The essay highlights the complexity of the process of evidence-based policymaking, in a world driven by existing political, social, and cultural ideologies. Ideas determine the frame in which one perceives a given problem. Solutions, which fit in that frame, are likely to be accepted. It is also important to underline that other factors besides ideologies i.e. individual self-interests and institutions are also likely to influence the shaping of evidence for policymaking. The present essay is limited in its ability to discuss these other factors, which shape evidence. However, it is also believed that many of these factors ultimately shape the underlying ideas and ideologies. Besides shaping evidence, ideologies also govern the different steps from generation of evidence to its publication and dissemination. Consideration of this knowledge is paramount where more efforts are being made to bridge the gap between the 'two worlds' of researchers and policy makers to make evidence-based policy as also for policy analysts.

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