

# British Journal of Medicine & Medical Research 3(4): 1517-1529, 2013



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# Examining the Link between Equity-Centered Health Policies, Autonomy and Decision-Making Process in Low and Middle Income Countries

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#### Authors' contributions

This work was carried out in collaboration between both authors. Author ME outlined the paper and wrote the first draft of the manuscript. Author BC contributed to the paper's structure and wrote the second draft of the manuscript. Both authors read and approved the final manuscript.

Review Article

Received 31<sup>st</sup> December 2012 Accepted 5<sup>th</sup> April 2013 Published 4<sup>th</sup> May 2013

# **ABSTRACT**

**Objective:** The purpose of this article is to examine the main underlying social values that define health policy decisions. We focus on LMICs, many of which are at an early stage of implementation of these evidence-based policy processes. This review aimed at analyzing the ethical and procedural principles that underlie these social values, their potential conflict and the challenges of implementing a decision-making process according to these values in LMIC.

**Methods:** Broad scoping search of international literature (December 2012) in PubMed, Cinahl, ISI Web of knowledge, Cochrane Library, and ProQuest. Search terms were "social values", "healthcare/ health" and "low and middle income countries" (terms adapted according to each database). There was no pre-defined limit of year or language. We excluded "grey literature" documents only. From a total of 252 hits, we finally selected and fully read 51 of them.

Results: The translation of health policy decisions from high-income countries to LMICs is complex, as they have differences that might affect the expected outcomes. Decisions should primarily aim at improving population health. The measurement of socioeconomic status and social inequalities in health, which is also context-specific, it is another primary objective in decisions about healthcare policies. Autonomy and equity might conflict in scenarios of limited budget. However, individual autonomy should be limited when affects other's individuals autonomy and social welfare. Evidence and transparency in the decision process is highly valued, and expenditure in information for decision-making should be promoted since it increases population health.

**Conclusion:** High-quality research evidence is paramount to implement health policies consistent with social values and the resources needed to produce relevant evidence can be considered a good use of public resources. A framework for decision-making should be anchored at least in three first order social values, improvement of population health, improving equity (in access to healthcare and health) and transparency.

Keywords: Social values; research evidence; equity in health; health policy; public health; low and middle-income countries (LMICs); developing countries.

#### **ABBREVIATION**

LMICs: Low and Middle-income countries.

#### 1. INTRODUCTION

Decisions about health policies and healthcare interventions consider several factors that affect people wellbeing, either individually or at population level. These elements represent some value given by the society, which constitutes the breaks of a legitimate decision-making process. There is certain consensus that the most important social value for decision-making in health systems globally is the health of the population [1]. This can be conceptualized as an objective function where the main argument of a maximization function is some metric of population health. For example, the average disability adjusted life years (DALYs) [2] or quality adjusted life years (QALYs) [3].

Although population health is the most important purpose of most health systems, there are some other intermediate or final aims that are also taken into account. For instance, the process whereby the decision-maker selects a new health intervention must be conducted with scientific rigor considering, at least, the assessment of safety, effectiveness and cost-effectiveness of those interventions. Further, the value of other procedural factors has also been acknowledged like transparency, timeliness, inclusiveness, review and independence [4]. In addition, moral principles such as equity and autonomy of patients are usually raised in the general discourse, though not always considered formally in the healthcare decision-making process.

Many high-income countries have implemented healthcare decision-making processes founded on the grounds of one or more of these social values. The vast majority has used the framework of health technology assessment to conduct a legitimate process. This might not be limited to new drugs or devices but also to public health interventions or broader health policies. Procedures of these nature have been well-supported by health professionals, social scientists and citizens [5].

Low and middle-income countries (LMICs) usually follow policies implemented in high-income countries. These policies have been applied based on the evidence measured in very different scenarios, which might affect their transferability to LMIC.

The purpose of this article is to examine the main underlying social values that define most health policy decisions. Our analysis highlights the relevance of distribute justice and autonomy in the current policy agenda as well as the importance of information in any process implemented to address them. We focus this analysis on LMICs, many of which are at an early stage of implementation of these evidence-based policy processes. This paper is structured in four sections: first, it presents the methods used to review the available literature; second, it examines the relevance of making explicit consideration of social values in health policy making; third, it analyses the potential conflict between two social values, patient autonomy and equity; fourth, it discusses the importance of defining the role of social values in healthcare decision-making processes in LMIC. Finally, it presents conclusions and recommendations.

# 2. SCOPING REVIEW OF LITERATURE: METHODS

In order to take into account all relevant literature published in scientific journals on the relevance of social values in the health policy decision-making process, we conducted a broad scoping search of the international literature in early December 2012 in the following databases: PubMed, Cinahl, ISI Web of knowledge, Cochrane Library, and ProQuest. The search terms included "social values", "healthcare/ health" and "low and middle income countries" (terms adapted to MeSH words according to entrees in each database). There was no pre-defined limit of year or language. We excluded "grey literature" documents only. From a total of 252 hits retrieved from this search, and after the revision of their titles and abstracts, we finally selected for this paper and fully read 51 of them. Papers were excluded if they did not explicitly addressed social values in health or healthcare, whereas broad papers that were not necessarily focused on LMICs but provided a relevant discussion on social values were still included in this paper. Five additional sources from books and internet were included.

For data extraction and analysis, we developed an outline of key questions that should be answered from this review. The questions were the following: (a) What are the key concepts related to health policy decision-making globally and in LMICs? (b) What ethical principles are most frequently mentioned in health policy process in general and in LMICs?; (c) What are the potential challenges for implementing a decision-making process in LMIC?.

Synthesis of selected papers was conducted following the mentioned three questions and through an iterative process of discussion between the two authors. Differences in interpretation and synthesis were presented and discussed several times until consensus was reached. The following section summarizes the results from this process; concluding remarks are presented immediately after.

This article should be considered a discussion paper built on the basis of literature collected through a systematic search, which provides the relevant literature. We argue that the methodology of systematic review does not apply to the characteristics of this manuscript, which aims to be a narrative analytical paper.

## 3. SOCIAL VALUES IN HEALTH POLICY MAKING

Neoclassical welfare economics suggests that social welfare is the main goal of an intervention or policy at governmental level [6]. This framework has been the cornerstone for many governments around the world. It implies, for example, that social decision-makers might choose to allocate resources to some social programs (e.g. education or health) instead of other alternative use of the same resources (e.g. dwelling or transport). In this broad context, decisions about these alternatives can be supported by technical elements such as the results from cost-benefit analysis (i.e. looking for the intervention that produces the highest wellbeing) or alternatively, as a consequence of a political particular interest [7]. These latter political decisions might be given by: (a) the *a priori* commitments of politicians with their supporters, (b) a response to pressures of influential social groups that might thread political, social or economic stability, (c) the search for social support to stay in power, and (d) a response to a broad social demand that seek quick answer through a legitimate process (i.e. the authority of a democratic -and therefore legitimate-government).

If we understand this wellbeing as the outcome of a social welfare function, then health should be considered an additive argument of such function. Thus, any increase in population health will produce an equivalent increase in wellbeing. However, some authors have argued that health has value by its own sake [1,8]. According to them, despite the fact that health will improve social welfare, improvements in population health should be pursued as an ultimate goal. This extra-welfarist perspective has been largely developed and discussed in the last 30 years [9]. Under this approach, a health authority is not compelled to conduct comparative analyses between different social areas (e.g. education versus health) but only restricting those comparisons to alternatives that produce health benefits. It also assumes a legitimate definition of the health budget, which will be allocated to obtain the maximum of health of the population. Many high-income countries have adopted this framework, which has provided the grounds of their decision-making processes in healthcare [10,11].

If the goal of the health system is population health, health authorities need to establish some other secondary principles to guide the implementation of their decision-making processes. There is wide consensus that any decision that affects the health of the population should be based on a rigorous scientific assessment of the evidence [12], and that this process should be transparent and at an early stage of the decision-making process [13,14]. The value of these principles responds to some skepticism of the professional community and citizens with respect to evidence generated by actors who have financial incentives (e.g. industry and private consultancies funded by manufacturers) [15]. Although transparency incurs in higher transaction costs for implementation, most societies agree on the supreme value of this element [16,17]. In terms of independence, this should be understood in the sense of providing guarantee of not being subject to pressure of any kind. However, it must be considered that total independence might be risky if the authority responsible for conducting the decision-making process is not subject to any supervision.

Other procedural principles that have been considered in this type of processes are concerned with inclusiveness of all relevant actors that should take part in the decision; the time used for the analysis should be the minimum possible; the review of the decisions periodically, and the right of all citizens to criticize the process and its results [4].

Although there is broad consensus on how to proceed on evidence assessment, it remains to examine which evidence should be evaluated, and more importantly, the principles that

guide this answer. We argue that any policy or intervention should be at least safe, efficacious and effective, which satisfies two moral principles, non-maleficence and beneficence, respectively. From a public health perspective that deals with a limited budget, efficiency is also essential [18]. Cost-effectiveness analysis provides unique evidence about policies that are efficient. Consequently, it leads to an appropriate allocation of the well-known limited resources of any health system. Thus, decisions based on cost-effectiveness are consistent with the moral principle of justice, in the sense that resources collectively generated to produce health are clearly transferred into efficient actions that prevent from waste.

In the last few years, many governments have claimed that future modifications of the procedures inside the health systems will be guided by two additional principles; equity and patient centered. These values have been presented as ethical imperatives that challenge the structures and procedures of many systems. The next section of this manuscript analyses these two social values in the context of healthcare decision-making. After this, we discuss the specific challenges we found in our review for LMIC.

# 4. PATIENT CENTERED AND EQUITY CENTERED HEALTH SYSTEMS: TWO COMPETING SOCIAL VALUES IN THE DEFINITION OF HEALTH POLICIES

# 4.1 The Social Value of Autonomy in Healthcare Decision-making

Many health systems in both high and LMICs have defined that strategies and policies must be patient centered. To achieve this goal they include, for example, efforts to implement personalized medicine (e.g. decision-making at individual level considering all relevant information of the patient including pharmaco-genomics for drug prescription) [19] or shared decision-making as a process whereby patients and doctors will choose the best treatment considering not only all relevant evidence but also preferences and choices from all key actors (patients, relatives, health professionals, and others) [20]. The idea of a patient centered system relies essentially on the moral principle of autonomy. However, its operationalization in health systems must take into account the following elements. First, healthcare providers (e.g. doctors) are assumed to be perfect agents of their patients. This assumption is largely biased as there is evidence indicating that doctors also respond to other incentives such as financial ones [21]. Second, the information brought to the decision problem should be the best available at that time. This requires enough time to elicit such information and, potentially, additional resources (e.g. cost of new diagnostic tests). When these conditions are not met there is the risk that decisions at individual level might not be consistent with the objective of producing the maximum possible health at population level. Third, even when satisfying the conditions outlined above, some individuals might choose very expensive treatments. In the context of systems with universal coverage, or at least with social protection schemes and limited budget, this might affect the access to healthcare for other individuals of the society (potential tension between the principles of autonomy versus equity). This is particularly complex in highly constrained budgets like those in LMICs.

# 4.2 The Distributional Dimension of Ethical Public Health and Equity as a Social Value for Healthcare Decision-making

Public health includes four main domains: decision-making processes based on evidence, a focus on populations rather than on individuals, a goal of social justice and equity, and an emphasis on prevention rather than on curative care. Public health and social justice have

been seen as one and the same thing, in that public health can be intended to have a socially just consequence [22]. However, it is not always possible to show that social justice is the intended outcome of a public health action. In seeking to set out a base of values for health policy decisions, two relevant overarching social values have been proposed by Mackie in 2010: equality and mutuality [23]. Both concepts are closely related to the ideas of: (a) fair distribution (of wealth, health, opportunities, labour and others); (b) trust between people, healthcare systems and communities [24,25]; and (c) the nature of the –usually unfair and hierarchical- relationships of power between those in the bottom and in the top in the social ladder in any society, community or organization [26,27].

Despite the large intention to address equity in healthcare globally, distributional aspects in social care [28] and healthcare have not being included in many recent policy efforts [29,30], not even in some high-income countries [31]. Social value judgments relating to equity in the distribution of health and healthcare in the UK for example have been less specific and systematic than those relating to cost-effectiveness in the pursuit of improved total population health [32].

In health economics, a discipline of public health, equity has also been formally addressed and discussed. From the supply side of the health system, the inclusion of equity-centered policies could be addressed by having a more competitive market of providers [33]. This competition should aim to produce improvements in technical efficiency and quality [34]. Where competition cannot be implemented, for example in isolated geographical places with a very small population, governments should guarantee healthcare at the highest standards. From the demand side, health systems must make efforts to aggregate this demand for healthcare [34]. In the case where private insurances exist, like in many LMICs, a regulation of this market should also guarantee that a well-defined minimum package of services should be covered [35]. This package should be defined on the basis of the evidence of safety, effectiveness, cost-effectiveness, and equity. In the case where the risk of the populations covered by private insurers differ (e.g. some of them cover less risky patients and some cover more ill people), a transference of resources should be done based on a risk adjustment process [36]. We argue that such policies (driven to attend these considerations) are equity centered as they are expected to result in the redistribution of resources for use in healthcare, favouring the most disadvantaged ones and not only improving general population health.

Among the most salient concepts to understand the relationship between health policies and equity is the need of healthcare and access to healthcare. An individual's need for healthcare has been defined as the ability to benefit from care [37]. Capacity to benefit exists when there is evidence that care provides benefits among similar individuals with a particular condition [37]. Need for care is therefore linked with evidence of effectiveness of healthcare interventions. Nevertheless, the concept also encompasses the idea of horizontal equity that is based on the principle of distributional justice, i.e. the achievement of health outcomes adjusted to the need of particular sub groups of the population [38]. Despite the relevance of horizontal equity in the concept of need, and given the limited resources and high burdens of disease faced by many countries, health systems cannot always meet all needs for healthcare [39]. Besides, individuals' perceptions of health needs may be shaped by factors including health beliefs and awareness, which may in turn affect care-seeking and healthcare access. At the population level, needs for healthcare are key to shape the countries' health system structure and process of provision of care.

Access is a multidimensional concept based on the interaction between healthcare systems and individuals, in which the dimensions of availability, affordability and acceptability interact to affect people's ability to reach health care [40]. There are several components of access to healthcare like geographical, financial, and social or cultural dimensions. Barriers to healthcare are factors that prevent people from accessing care. They can occur at different points on the pathway to access, from recognition of health needs, to utilization of effective, appropriate and acceptable services and attainment of desired or appropriate outcomes. Linked to the previous point, barriers can include both 'supply side' factors relating to the costs and organisation of services, as well as 'demand side' factors, such as knowledge, cultural beliefs and attitudes concerning medical conditions, and patient preferences and priorities.

# 4.3 Autonomy versus Equity in Healthcare Decision-making

Health policies that aim improvement in distributional aspects of population health might affect patient choices, usually reducing their ability to choose from a broad list of alternative therapies. Therefore, an equity centered policy based on distributional justice might affect the goals of a patient centered health system. On the other hand, policies aimed to facilitate instances where patients make their own choices might impair distributional goals of equitycentered health systems. This sets a complex scenario where a health system might not be patient and equity centered at the same level. We argue that this should not be seen as a competence of principles because there is an implicit supremacy of one of these values by its own philosophical meaning. Autonomy has recognized moral value in any judgment regarding the individual as a separate entity [41]. This is, for example, the framework used in medical education where a doctor must make decisions in order to produce the maximum improvement of health of his/her patient. However, in public health we are not only interested in the consequences of health policies at individual level but also as a community. Thus, individual autonomy should always be restricted to those choices that do not affect the autonomy of others [42]. Further, as a community, decisions must guarantee fair distribution of health outcomes through the correct allocation of resources, including alternative recommendations across sub groups with a similar health problem.

Social planners and individuals face several limitations to make health-related decisions. Available information is always, to some degree, uncertain (i.e. the lack of precision in the estimation of treatment effects) and incomplete (i.e. lack of understanding heterogeneity) [43]. Because uncertainty implies that a wrong decision can be made, there is a quantifiable health that is expected to be forgone due to uncertainty. Therefore, decisions made today, at any level, must assess the expected additional health that would be gained from applying better information in future patients [44]. Thus, the assessment of evidence for the purposes of achieving equity and offering autonomy should not be restricted to the current information but also to the alternative of future information that might change our current decisions.

The extent to which autonomy of individuals for health care can be implemented and responds to equity-based objectives should be a matter of further discussion and research. Because the lack of information leads to a limited understating of the potential effects of individual decisions on population health, we might find that the impact of providing high autonomy to patients in some health problems does not conflict with the equity goals of the healthcare system. This remains as an empirical question and its result is likely to vary across different health problems and different societies.

#### 5. SOCIAL VALUES FOR HEALTHCARE DECISION-MAKING IN LMIC

The World Bank's widely used definition classifies countries by Gross National Income (GNI) per capita (\$US dollars). These groups are, according to 2010 GNI per capita: (a) low income, \$1,005 or less; (b) lower middle income, \$1,006 - \$3,975; (c) upper middle income, \$3,976 - \$12,275; (d) high income, \$12,276 or more [45]. The term is often used to aggregate countries into groups for analysis; however, we need to recognize the wide range of contextual differences among LMICs. Although they are grouped in terms of the size of their economy, there are differences in terms of development trajectories and economic policies. There is also great diversity in terms of geography and socio-cultural contexts and how health systems and health policies are conceived and implemented.

There are at least four differences between LMIC and high-income countries. First, there are well-known demographic and epidemiological differences between high and LMICs. Thus, their needs for healthcare differ both in the scale and in the patterns of ill health and perceived needs. Second, LMIC healthcare systems experience significant resource restrictions, not only financial but also in terms of infrastructure and human resources [46]. Third, there are considerable differences between healthcare systems in high and LMICs. In particular, there is a consistent lack of universal coverage to healthcare in the latter driving specific and challenging public health decisions [47,48]. Fourth, LMICs often face multiple socio-political problems that impose on-going burdens to their societies. Constant changes in political leaders, oppressive political systems, conflict, poverty and economic instability are some of the many difficulties that frequently affect access in LMICs [49]. These differences make difficult to transfer policies applied in high income countries directly to LMIC.

Generally speaking, policies in LMICs have had to address the most basic needs of their populations. In order to do so, they have improved their production in the short run making use of natural resources and many times with scant considerations of the adverse social effects of such resource overexploitation. In health, more specifically, in the last century these countries have focused their efforts in improving basic sanitary conditions and improving basic elements of care (for example, professional assistance for antenatal care and birth delivery) [50,51]. The consequences of these policies have had positive effects in terms of average national wealth, national productivity and in health indicators such as life expectancy. Nevertheless, these average outcomes generally do not reveal distributional effects that are currently taking a more protagonist role all over the world. In health, although some LMICs still face 'basic' challenges (e.g. high maternal and infant mortality, basic living standards and sanitization), others had been able to advance further, facing the complexity of an epidemiological transition similar to high-income countries. We argue that there is no reason why LMIC should limit their efforts of evaluating evidence in their health decisionmaking processes. Despite the fact that most relevant evidence comes from high-income countries, LMICs still require developing decisions based on a transparent process of analysis and adding their particular constraints into their formal assessment process.

There are several LMICs with mixed health systems, with unarticulated public and private healthcare systems in which richer people have access to better healthcare than poorer people, which incubates a complex social problem. People who bear the consequences of unequal distribution of health benefits are not just poor but also socially vulnerable, older, isolated and discriminated [52]. They are dying younger and, while living, experiencing worse quality of life than those at the top of the social ladder. In addition, these risks are often transferred to their relatives and offspring. Evidence on the effect of health inequalities on social welfare and population health has been produced for several decades and it is

widely supported [53-56]. Therefore, any reform or change introduced in health systems from LMICs should consider equity in access and equity in health as a fundamental social value that has to be reflected in rigorous impact assessments and also in the everyday health policy decision-making process.

In addition to equity, two other elements must be considered. First, the implementation of policies is challenged by the structure of the health system in LMIC. Many countries do not have channels to ensure dissemination of information or the infrastructure (human resources or technologies) to apply new interventions. The transaction costs related to implementation must be considered in the stage of assessment. Second, transparency is a principle highly valued in many societies because it supports legitimate decisions. Many LMICs face lack of legitimacy in their decision-making processes (without deliberation or even consultation), which leads to delay of the decision, implementation problems and uncertainty about expected outcomes. Therefore, any policy should be generated and implemented alongside a transparent and public decision-making process.

Finally, these social values might not be the same between LMIC. Moreover, they might vary across different jurisdictions within a country. However, it seems entirely reasonable that health, equity in access, equity in health and transparency should be always considered across jurisdictions.

### 6. CONCLUSION

Throughout this article we have developed several arguments that support the idea that health policy seeks to satisfy a set of social values, but these are not always properly acknowledged in the different stages of the translation of research evidence into policy practice. These social values are mostly related to the ethical principles of beneficence, non-maleficence, autonomy and distributive justice, but they should also consider other procedural values such as transparence and independence. They are usually present in the stakeholders' discourses, but the actual effective translation into health policies is a remaining challenge in many countries, especially in LMICs. We argue that good research evidence is paramount to implement health policies that are consistent with such social values. Moreover, the use of resources to produce such evidence can be considered a good use of such public funds.

The generation of evidence in any country should be generated in order to respond to the needs of the decision-making process of that particular country. This could be, for example, guided and managed by a centralized governmental entity. A centralized agency do not necessarily implies centralized mandatory research topics that might affect researchers' autonomy. It simply supports the need of having an efficient process that guarantees the development of transparent health policy decisions. These decisions should be consistent with the country's fundamental social values, where population health and equity in health seem primary goals. These are significant challenges worldwide, but particularly relevant to LMICs as they constantly face the dynamics of population health needs due to the epidemiological transition they experience, highly restricted budgets, lack of information, and good quality evidence.

Although this review has been conducted as a systematic search, it does not provide results in a systematic manner but narrative. Hence, it relies entirely on the author's judgment of the reviewed literature, which is a limitation of this article. However, we argue that, as most of

the literature in ethics and philosophy, this approach is totally valid and it is a contribution to the discussion about social values for decision making.

The effective transferability of health policy decisions made in high-income countries to LMICs is complex, as they do not necessarily fit their reality. The measurement of socioeconomic status and social inequalities in health are also context-specific and might vary in their indicators and meaning from country to country. These dimensions need urgent attention in health policy in LMICs and are the first step towards equity-centered health policy decisions.

In overall, and based upon the key findings of this review, we found that high-quality research evidence is paramount to implement health policies consistent with some first order social values and the use of public resources to produce relevant evidence could be considered a good use of such funds. The generation of evidence should also respond to the needs of the decision-making process, ideally managed through a centralized governmental entity. Any change implemented in the health policy decision process should be founded on an explicit set of social values, which in turn should respond to a formal prioritization process of all identified social values for that particular population. Health should be considered the most important goal of any health system, though the process should account for other procedural (e.g. transparency and independency) and moral principles (equity and the highest possible degree of autonomy). LMICs have made very little progress on this matter, which offers an opportunity to implement decision-making processes grounded on those principles.

#### CONSENT

Not applicable.

### ETHICAL APPROVAL

Not applicable.

## **ACKNOWLEDGEMENTS**

The authors acknowledge the comments received from peer reviewers.

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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