*Estudos de Economia*, vol. VIII, n.º 4, Jul-Set., 1988

# SOCIAL JUSTICE AND EQUITY IN HEALTH IN PORTUGAL

*João Pereira* (*)

> So I must confess that the outcome of the discussion is that I know nothing. After all, if justice still remains undefined, I can hardly know whether it is in fact a virtue or a vice. Nor can I know whether the just man is in fact happy or miserable.
>
> *PLATO, The Republic*

## 1 — Introduction

Since 1980 there has been mounting concern in European countries over inequalities in health and health care. A vast research effort to monitor and explain them has been initiated, producing an array of statistics which generally present a mirror image of the patterns found by the Black Report for the UK (DHSS, 1980). In broad terms, these indicate that lower socio-economic groups experience higher mortality and morbidity rates than their better-off peers; while their use of health care services, when controlled for need, tends to be relatively lower (cf. Illsley and Svensson, 1986; ENSP/WHO, 1987). Much of this work, however, concentrates on measures of service-utilization and outcome (mainly mortality), unquestioningly implying that equalizations of such parameters are objectives of national health policies. As a guide to policy it may well be ill-conceived or inappropriate. Each country will have its own equity goals suggesting different policies and more or less difficult trade-offs with other objectives (efficiency and preservation of individual liberty, for example). Thus, if a health system has equity of access to health care as its aim it is not directly relevant to monitor differences in health care consumption «per se» and much less differences in mortality. Yet only in isolated cases have attempts been made to relate empirical findings to the general equity objectives of health systems and to locate the latter in philosophical discussions of societal goals.

Economists were early to see that without more explicit consideration of normative issues the debate on equity in health and health care would remain «confused and confusing» (Mooney, 1983). A limited amount of work was initially undertaken on especifying the objectives of health policy with regard to equity (Le Grand, 1982; Mooney, 1983). Notions such as equality of public expenditure on health services, equality of access to health care and equality of health itself were discussed, yet there was a failure to locate these specific objectives in theories of society and public policy and to relate them to existing economic definitions of equity.

---

(*) Assistente de Economia da Saúde na Escola Nacional de Saúde Pública. Aluno pós-graduado na Universidade de York, Reino Unido.

If the economist is to provide useful policy recommendations for allocating scarce resources in a form which promotes equity, then the term must be defined in as precise a fashion as possible. The present article, therefore, reviews recently proposed as well as potential economic formulations that may help do clarify the crucial definitional stage of a research strategy in inequality in health. In this sense, then, it is best seen as a platform to a rigorous positive analysis of the problem in Portugal; and as an attempt to avoid, in later stages, the confusion which seems to permeate the field.

There is of course no reason why it should be economists who tackle questions concerning the normative aspects of equity in health. Some might even argue that equity is not a legitimate economic concern and that economists in discussing the problem are trading dangerously on the terrain of political philosophers. Objections usually involve a three-pronged attack: that it is impractical to define equity since the diversity of individuals' views on the issue means that a consensus cannot be achieved; that, unlike efficiency, it involves value judgements and is therefore not amenable to positive analyses; and that it is impossible to describe a distribution as just or unjust when it is the result of the operation of the free market since no individual is responsible for the outcome. All these points have been shown to be seriously flawed (Thurow, 1976; Le Grand, 1984). Despite there not being anything approaching a consensus among economists on the meaning of equity — in the health field or anywhere else —, economic science can, in fact, provide definitions which are at the same time sufficiently general to command a broad consensus of value positions and sufficiently specific so as to permit useful application to health policy.

I begin in part 2 by identifying the equity objectives of Portugal's health system. Part 3, which constitutes the main body of the article, critically appraises formulations of equity, from Nozick's (1974) libertarian conception of social justice as «entitlement» to Sen's (1980) «equality of basic capabilities», which broadly reflects socialist values. The aim throughout is to consider whether discipline-based conceptions reflect Portuguese health-equity concerns and can help us in the task of measuring adequately patterns of inequality, the factors which contribute to it and the corrective action which should be taken. Finally, part 4 provides some conclusions and suggestions for further research.

## 2 — Equity and the Portuguese NHS

The question of equity in health and health care has, until recently, either been ignored or treated rather ambivalently by Portuguese legislators and policy makers. Unlike other developed countries, where for many years, policy statements have revealed a concern for some kind of equality in provision or access to services or at least that no part of the population should fall below a designated safety net, Portugal is a latecomer to political acceptance of equity goals in the health sphere. Only as late as 1976 does the question surface with explicit recognition in the post-dictatorial Constitution of the «right of all to the protec-

tion of their health as well as their duty to safeguard and promote it» *(Constituição da Repúbica Portuguesa,* 1.ª revisão, 1982). The collective right requires, according to the Constitution, the creation of a universal, general and free national health service *and* systematic improvement of the economic, social, cultural and working conditions which garantee and promote health. With regard to the former the State should garantee equity through «the acess of all citizens, independently of their economic status, to preventive, curative and rehabilitation services»; as well as through «rational and efficient physician and hospital cover throughout the country» (*ibid.*). The treatment of factors external to the health care system is less clear since nothing else is said on the matter in article 64, which considers health. There are, however, in other sections of the Constitution various pronouncements on equitable access to commodities which may be rightly considered as health producing (i. e., adequate housing, sanitation, safe working conditions and education). If these are taken in conjunction with the statement that health protection is assured through the creation of an NHS *and* a health promoting environment, there appear to be good grounds for interpreting the Constitutional health equity objective as «equal access to the commodities which affect health». I shall assume, for now, that this is the correct interpretation.

Subsequently, in 1979, the National Health Service Law was passed through Parliament. It was, according to its proponents (the Socialist Party), an application of the principles embodied in the Constitution. It was argued that the State should progressively assure the attribute of «equality» in national health policy and that specific measures should be ajusted to those in other related sectors (Assembleia da República, 1979). Yet, beyond the preamble the law had nothing to say about health «per se»: it is strictly about health services. Article 4 states that «access to the NHS is garanteed to all citizens independently of their economic or social status» (*ibid.*). Elsewhere (Pereira *et al.,* 1985), I have argued that the correct interpretation of this statement is in terms of «equality of access to NHS care for equal need». This seems the only plausible way of formulating the NHS's aims. In economic terms what is at issue here is a concept of horizontal equity expressed in terms of access: that is, equal access for equal need. Whether vertical equity — unequal access for unequal need— is also an objective is debatable (1). I shall assume that despite the commitment to provide all forms of care (the universality objective) vertical equity is not explicitly an aim of the Portuguese NHS.

Policy statements since the creation of the NHS have been rather ambivalent with regard to equity. Generally, there have been vague commitments to equitable distribution of resources and non-discrimination in treatment, but few concrete pronouncements on guiding objectives. Fortunately, much of the confusion has recently been cleared up. The present government, in its programme,

---

(1) See West (1981) for a discussion of the concepts of horizontal and vertical equity when applied to health.

specifies very clearly what its aims will be with regard to equity. It will seek to «guarantee effective equality of opportunity to all citizens in access to health care» (Presidência do Conselho de Ministros, 1987). This seems, at first sight, consistent with the NHS objectives described above. However, the Government will also seek to «alter the National Health Service Law, recognizing particularly the viability of alternatives to it and providing incentives for the creation of health insurance schemes» (*ibid.*). Arguably, then, the correct objective in future will be not equality of access to NHS care, but to health care, both public and private. Just how equality of access to private health insurance will be achieved is not spelt out, bur for our purposes it is important to realize that its measurement is equally important to that of access to the NHS since the Government has committed itself to equity of access to health care in general (2).

There seem, therefore, to be three possible interpretations of equity in Portuguese health policy, all defined in terms of equality:

*i*) Equal access to the commodities which affect health (Constitution);
*ii*) Equal access to NHS care for equal need (NHS Law);
*iii*) Equal opportunity of access to both private and public health care (XI Constitutional Government Programme — Social Democrat).

These should be taken as the correct yardsticks for the measurement of collective decisions in the achievement of equity in Portuguese health and health care. Discussions of similar egalitarian definitions are to be found in Le Grand (1982) and Mooney (1983), who looked at equity objectives in the UK. More recent work, however, has suggested that we need to look beyond such «simple» formulations since they suffer from a number of analytical and practical problems and may in some cases conflict with commonly held views on what is just and fair [significantly, both Le Grand (1987) and Mooney (1987) have argued along these lines]. What seems to be missing is the location of their philosophical and economic underpinnings.This is necessary both in order to enhance our understanding of what equity in health and health care entails and, more pragmatically, to provide a guide as to how eventual monitoring of objectives should be tackled through positive analysis. Therefore, the focus of the rest of the paper will be on the philosophical and economic basis of health-equity objectives and the practical forms of interpreting them in research.

## 3 — Principles of equitable distribution

Various conceptions of equity have been suggested in the literature which are relevant for the health inequality debate. No comparable consensus has

---

(2) Some could argue, with reason, that a more consistent specification of the Government's health equity objectives would be in terms of a «decent minimum» (see part 3) rather than in terms of equality.

yet been achieved to that held by Pareto optimality, which dominates economic discussions of efficiency. I propose to review here the most prominent principles of equitable distribution, with a view to finding those which reflect the concerns of Portuguese legislation and policy and which are suitable for positive analysis.

An obvious starting point is to consider criteria for evaluating different definitions. Three important guidelines which have been suggested are that a principle should have small information requirements (in particular, it should not require that utility be interpersonally comparable or cardinally measurable); that it shoulds be easily comprehensible; and that it should be possible to find allocations of resources that are simultaneously equitable and Pareto efficient (see Rawls, 1971; Sen, 1977; Pazner and Schmeidler, 1978). Le Grand (1984) suggests, however, that the most important criterion and «one besides which these others seem essentially secondary is that of intuitive acceptability [. . .] (that is, a criterion which will) [. . .] command general agreement». In the present article this is taken to mean a principle that faithfully reflects the concerns of legislative and policy statements (i. e., the discussion in part 2). This will not reduce the choice of distribution principles to identifying that which is broadly in line with a society's value set —arguably its specificity and potential for empirical application are equally important —, but we will have gone some way to clearing up doubts as to its acceptability in a given context.

#### 3.1 — Distribution according to entitlement

The libertarian philosopher Robert Nozick (1974) provides a most consistent and illuminating discussion of equity, often discussed by economists, in his theory distribution according to «entitlement». Its core position is that one is entitled to what one possesses provided it was acquired justly: that is, through earnings, through inheritance or through redistribution by government of holdings aquired illegally. It is, therefore, a procedural theory: whether or not a specific distribution is considered equitable depends entirely on the path used to reach it. Its implications for equity in health are fairly straightforward. No one citizen has a right to health care unless it has been acquired through the market. Attempts at redistributing resources, even if they were aimed at providing incentives for those who use health services less efficiently (i. e., the less educated and the poor) would in themselves be considered an injustice. The theory also attaches no weight to the unfortunate: it is essentially a matter of fate that some are born in a healthy condition and others are plagued with chronic medical problems. Nor is there recognition of sentiments of caring or generosity by the well with regard to the unwell, often given practical expression in the subsidization of health care services (Culyer, 1980). Finally, it fails to consider either the role of possessions which are received as social goods (i. e., medical education) or the pervasion of externalities and consumer ignorance in the health care market.

### 3.2 — The «decent-minimum»

Given the extreme consequences of Nozick's principle of distribution for social or health policy other Libertarians have suggested a role for some sort of safety net, that is a standard below which individuals should not be allowed to fall. Such an approach — often designated as the decent minimum — points towards a configuration of health services strongly weighted towards the private sector, with the State providing a limited and minimal level of care for the poor. The key to its operationality is that it requires a value judgement as to what constitutes the decent or social minimum, but strangely its proponents have been reluctant to define exactly what it is. In the health field only Enthoven's (1980) discussion of a Consumer Choice Health Plan comes close to doing so. Instead of criteria he suggests a list of «basic health services» which Health Maintenance Organizations (HMO's) should provide. But it is far from clear that at the end we are left with a clear idea of what constitutes a decent minimum, since he provides no sound reason as to why certain types of care should be left on or off the list. Ultimately, the distinction made between high an low option plans suggests that we can choose the «decent minimum» by reference to average costs for actuarial categories. This seems a somewhat unjust principle for allocating health care.

### 3.3 — Utilitarianism

The goals of utilitarianism are commonly summarized as «serving the greatest good for the greatest number». In economic terms this implies a decision rule where resources are allocated so as to maximize aggregate utility. Quite why some writers view utilitarianism as a theory of equitable distribution is difficult to perceive. On the one hand, it is well established that an egalitarian distribution can only result under classical utilitarian principles if there exist identical preferences (Culyer, 1980). Yet there is a stronger argument against it, brought out in Sen's (1973) well known comment that «maximizing the sum of individual utilities is supremely unconcerned whith the interpersonal distribution of that sum». The activities or individuals to which resources are allocated at the margin depends simply on comparisons of utility. Thus, if a rich individual responds better to a given course of treatment than a poor one, the utilitarian decision rule requires that more resources be attributed to him. The resulting distribution may well be efficient but it is unlikely that it will conform to most people's conception of equity. There are also various technical problems associated with utilitarianism, all inevitably linked to the impossibility of interpersonal comparisons of utility. Indeed, the identification of a just utilitarian distribution depends upon such a wealth of empirical facts which are so difficult to obtain that it seems unproductive to attempt to apply it to health and health care. Furthermore, these factors are not directly deducible from the principle itself, which further complicates the exercise.

### 3.4 — Rawlsian maximin

Another prominent philosophical discussion of social justice, which has attracted the attention of economists, is John Rawls' (1971) theory of maximin. It makes justice an uncompromising aim in suggesting that social policy should seek to maximize the position of the least well-off. Rawls considers a set of goods whose production and distribution, he suggests, should not be left to individuals themselves. These «primary social goods» include basic liberties; freedom of movement and choice of occupations against a background of fair opportunities; powers and prerogatives of office; income and wealth; and the social bases of self-respect. Rawls then hypothesizes an «original position» where all individuals operate under a «veil of ignorance». In such a context rational men would be risk averse and choose as a preferred arrangement a situation where the worse off have their position maximized. What drives them to such a choice is not a concern for the least advantaged, but a fear that they themselves might turn out to be, once the veil of ignorance is uncovered, the worst-off citizens in society.

According to Le Grand (1987), the application of Rawlsian maximin to the health field requires that inequalities in either health or health care be justified only if they operate to the benefit of the least advantaged. He criticizes such a rule as a guide to health policy on two grounds. First, because it raises a number of theoretical and practical difficulties. For instance, are the least advantaged to be defined in terms of their overall consumption of primary goods or in terms of health or health care? Furthermore, is it realistic to suppose that we can readily distinguish those inequalities that benefit the least well-off from those that do not? One could add that the principle implicitly suggests that an equitable distribution would be that where all individuals have the health status of the sickest person. The second objection has a libertarian strain. It is that maximin would lead to redistribution to those whose poorer health, inadequate consumption of health care or actual poverty were the result of their own decisions. Arguably, however, Le Grand's direct application of the Rawlsian principle to the health field is too ambitious, for neigher health or health care were designated as primary social goods by Rawls himself ([3]). Daniels (1981) has suggested that the most promising strategy for extending maximin theory to the health field is to include health care institutions among the background institutions involved in providing for fair equality of opportunity. However, such an approach merely has the effect of colapsing the definition of equity into one of equality of opportunity of access to health care ([4]). Therefore,

---

([3]) Indeed, including either health or health care would imply trade-offs with other primary social goods such as income and wealth and inevitably interpersonal comparisons of utility which Rawls is keen to avoid (Arrow, 1974).

([4]) Daniels himself readily admits that his account «does not pressupose the acceptability of Rawl's theory» (Daniels, 1981).

although this interpretation appears in tune with the concerns of Portuguese health policy, it has the unfortunate effect of making the theoretical structure redundant. We are left with no more than a simple interpretation of equity, which is problematic, and no idea as to how the concept may be applied in positive analysis.

### 3.5 — Envy-free allocations

The theoretical and practical problems associated with Utilitarianism and Maximin have led to a number of economic discussions which seek to provide a more rigorous grounding for equity concerns. One such approach concentrates on defining the essencial characteristic of an equitable distribution. It is suggested that it is best described by the criterion of non envy: that is, where a person's relative advantage is judged by the standard of whether, he or she would have preferred to have had the commodity bundle enjoyed by another person (Pazner and Schmeidler, 1978; Varian, 1987). This approach is not altogether dissimilar from Rawls' view. It shares with it a concern that no individual should be actively excluded from enjoying the commodities which afford opportunities for living a satisfying life. Presumably individuals would only not be envious of others if they were assured that this were the case. But the list of things underlying the non-envy approach is arguably less extensive than Rawls' characterization of primary goods. While income is certainly implicit in the approach, it is unlikely that other considerations discussed by Rawls, such as the social bases of self-respect, can be accomodated.

Despite its attraction to economists as a discussion of equity, it is doubtful whether the non-envy approach could be suitably applied as a guide to health policy. On the one hand, it is well-established in the technical literature that the pursuit of non-envy can lead to some peculiar and unpalatable results (Feldman, 1987; Varian, 1987). When agents are more or less symmetrical, the concept seems to work quite well; yet if one or more agents happen to be, say chronically sick, there is no opportunity for exogenous compensation within the framework. Similarly, it could not account for a case where a kidney patient's demand for dialysis takes precedence, by general agreement, to a tennis player's demand for rackets; or less trivially, to demand for analgesics. What is missing then is a view of what others might regard as equitable and not simply oneself. The approach also fails to provide a more or less complete ranking of alternative states, which clearly appears necessary in the health field. It gives only an answer as to what constitutes a fair distribution; should no such feasible allocation be found (as seems to be the case in many situations in the technical literature) one is left with no suggestions as to how decisions should be taken. Furthermore, even if fair allocations were found it does not follows that two states passing the criterion would be readily accepted as equally just.

Health ecomomists have traditionally approached questions of distribution from a different angle. Rather than appealing directly to a general principle of justice or defining what constitutes an equitable distribution, they have looked at what motivates individual concerns for fairness in health. One group of writers have formalized such an approach through what is commonly termed the «caring externality» (Lindsay, 1969; Culyer, 1971). In contrast to the paradigmatic economic approach, individuals are held to be concerned not only with the bundle of goods and services they are to receive, but also with that to be had by others. In this sense, generosity, sympathy or caring are explicitly incorporated into the analysis through the mechanism of specifically interdependent utility functions developed by Hochman and Rogers (1969). This is in stark contrast to the non-envy approach which has dominated economist's discussion of equity. There, individuals consider the consumption bundles of others merely for the effects of comparison.

Although this research was originally conceived as an explanation of widespread support for direct public provision of health care, indirectly, it holds important implications for the type of equity which should guide health policy. I would argue that there are three key insights suggested by the approach: health status as the focus of concern; an absolute rather than relational objective; and a role for exogenous compensation. Economists at York University have recently suggested, albeit tentatively, a conception which apparently draws on these insights (Culyer, 1987; Maynard, 1987). It is that a distribution which maximizes health, as measured by the technique of Quality Adjusted Life Years (QALY's), is essentially equitable.

QALY maximization, however, remains a controversial topic among health professionals (Smith, 1987) and even among economists (West, 1986). In particular it is argued that a maximization approach ignores the distributional concerns of public health care systems such as the NHS. Maximizing the sum of individual health states tells us nothing about the interpersonal distribution of that sum. Defenders of the QALY approach could quite rightly respond that this is a pointless criticism since health cannot be redistributed among individuals. Yet behind it lies a more fundamental argument. Consider the case of António (who is relatively rich, well educated and well nourished) and Bela (poor and relatively ignorant of efficient health production methods). Both suffer from the same ailment and both undergo the same treatment. Yet because of his personal and environmental characteristics António is able to better respond to treatment and thus gains a greater number fo QALY's. Should health policy then redistribute resources to individuals like him? Clearly few would agree with such a principle. However, according to Culyer (1987), it is perfectly feasible to incorporate non-utility information into the QALY metric by attaching weights to current health distributions. He gives the examples of age or desert but presumably socio-economic information could be similarly incorporated. If the weights are correctly applied in the sense that they reflect societal concerns

on health equity, then we are left with a conception which is specific and empirically testable.

At present, the QALY maximization approach to equitable distribution remains handicapped by the failure of its proponents to actively defend it and develop its implications. It must be shown that, generally, suitably weighted QALY maximization will yield results which are harmonious with equity concerns and that unpalatable outcomes are not a significant feature. Yet even if this were accomplished there would inevitably remain doubts as to the suitability of the approach. In particular the wealth of information required could prove irreconcilable with the obvious criterion that a principle should have few information requirements. Nor should we underestimate the actual shortcomings of the QALY metric itself; for example, problems of measurement or its handling of risk and certainty [5]. Furthermore, although it need not do so, it is very likely that QALY maximization would lead to an excessive concentration on the effects of medical procedures in detriment to other health producing activities. Inequalities which are generated outside the health care system would tend to be overlooked unless there were opportunities for compensation within it. Finally, one could also object to the very idea of health maximization as the prime objective of health systems. Of course, it would take a courageous stretch of the imagination to believe that it should not be an aim or indeed that technically it is not the best way to proceed. Yet health systems consistently reveal other aims as paramount: the demonstration of caring or the non-exclusion of patient groups, for example. We saw earlier that non-discrimination was an important feature of Portuguese health policy objectives. It may be that the overall aim of medical care is indeed health maximization, but that specific provision arrangements (such as an NHS) have adjacent objectives (such as guaranteeing equal access for equal need) which take precedence in any eventual trade-off.

#### 3.7 — Equity as choice

I turn now to Le Grand's equity as choice approach (Le Grand, 1984, 1987). Its core position, when applied to health, is stated as follows: «if an individual's ill health results from factors beyond his or her control, then the situation is inequitable; if it results from factors whith his or her control, then it is equitable» (Le Grand, 1987). Formally, an individual is said to be faced by a choice set which he seeks to maximize subject to constraints — the factors beyond individual control. An equitable situation is that which is the outcome of individuals choosing over equal choice sets. What matters here, then, is not the end result, but the history of a specific situation. In this sense, equity as choice hearkens back to Nozick's (1974) entitlement formulation.

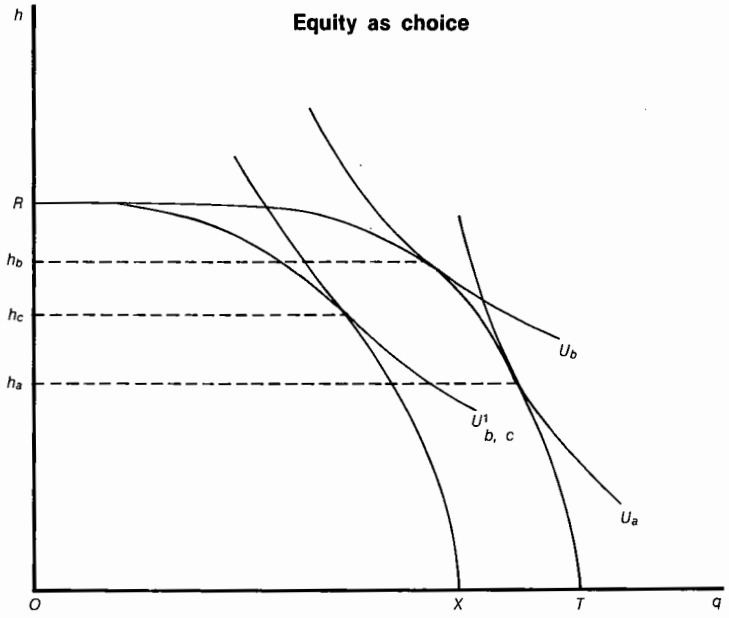
---

[5] See West (1986) for a discussion of such problems.

Figure 1 (reproduced from Le Grand, 1987) illustrates the general argument. An individual's health status ($h$) is plotted agains the quantity of a health-harming activity ($q$), such as smoking, drinking or working in a stressful environment. It is assumed that a trade-off is possible between $h$ and $q$. Le Grand considers two individuals, $A$ and $B$, whose choice sets between $h$ and $q$ are identical and portrayed by the frontier $RT$. Both derive utility from the health-harming activity and from health itself, but individual $A$ derives greater pleasure from $q$ relative to $h$, when compared to individual $B$. These assumptions are incorporated in the position of the indifference curves $U_a$ and $U_b$. $A$'s equilibrium point (determined where $U_a$ is tangent to $RT$) implies a lower level of health ($h_a$) than individual $B$'s ($h_b$). According to Le Grand's conception, this situation is not inequitable since both $A$ and $B$ have made informed decisions, exercised over the same range of choices and based on their own particular preferences.

FIGURE 1

**Equity as choice**




**Source:** Le Grand (1987).

A third individual, $C$, is now introduced into the analysis. His preference ordering is the same as $B$'s, but given that he faces a different choice frontier ($RX$), his equilibrium health level turns out to be below $B$'s at $h_c$. The shape of $RX$, according to Le Grand, incorporates the assumption that individual $C$ is poorer and less able to withstand the effects of the health-harming activity. The differences in health between $B$ and $C$ are not held to be inequitable, since they arise not from dissimilar preferences, but from different feasible choice sets. Therefore, distributions are only equitable if they are the outcome of individual choice under equal constraints.

Is this a suitable formulation of equity concerns in the health field? Certainly it has quite obvious advantages. On the one hand, by paying due respect to a distribution's history, it serves as a useful reminder that information on end-states may not provide a sufficient basis for making equity judgements: it is equally as important to know how a particular distribution came about. The choice theoretic framework in which the analysis is argued should also facilitate comparison with other economic principles of distribution and allow further development at the conceptual level. So far only the foundations of the approach have been put forward. Equity as choice also reveals promise for application in positive analysis. In Grossman's (1972) model of the demand for health it has a ready made framework of individuals exercising choices regarding health investment and consumption decisions within constraints. Equity under that model could be interpreted as equalizing the present cost of health investment for all individuals. Intuitively such an approach appears remarkably similar to equalizing the constraints people face.

Unfortunately, the equity as choice account is also open to a number of criticisms. It is far from clear, for example, that Le Grand has established, as he contends, a definition of equity which commands wide agreement in society. Some might argue that in the field of health, where uncertainty and consumer ignorance prevail, individuals are simply not in a position to make informed decisions. This problem is particularly acute in the case of medical care, while addiction to health-harming activities, as Le Grand accepts, poses related difficulties. In short, the assumptions of autonomous preferences complete certainty and perfect information appear rather extreme in the health context. This is not, however, a crucial argument since relaxing the assumptions could make the account more relevant, albeit with the loss of its definitive features. The introduction of uncertainty into the Grossman model as in Dardanoni and Wagstaff (1987) is a case in point. I should like to argue, however, that doubts over the equity as choice approach go deeper. In particular that there are flaws in two crucial stages of the analysis: the diagrammatic exposition which implies that individuals trade-off health-harming activities whith health itself and the egalitarian prescriptions which strangely seem to arise from the analysis.

We have seen that figure 1 yields consistent results showing that judgements as to the equity of a particular outcome will depend on the configuration of preferences and feasible choice sets. But now suppose we wanted to know (as seems reasonable) the efects on health of differential preferences regarding a health-producing activity, such as consumption of medical care (6). It is not difficult to perceive the utility maximizing analysis breaking down due to health and health care being joint products. In other words, the results

---

(6) Indeed, a valid criticism which could be aimed at Le Grand's analysis is that it is overly concerned with health-harming activities; the effects of health-producing activities are simply not considered.

obtainable through figure 1 depend crucially on the conventional properties of feasible sets and preference orderings applying. In the case of joint products they will not hold. Surely it is fair to ask that a diagrammatic framework should handle equally well the effect on health of both health-harming and health-producing activities.

The problem seems to be that individuals do not directly trade-off health-harming and health-producing activites with health itself. They «choose» their health levels by trading-off the activities against each other: either investing or disinvesting in their health stock; in the former case through activities such as health care or education, in the latter through insalubrious lifestyles, nutrition or work environments. The final product — healthy days free of illness — is the result of trade-offs between these commodities.

The other major weakness in the account is brought out sharply in the discussion of policy implications. One cannot help out be surprised how from an individualist framework arise fairly conventional egalitarian arguments. Although this is, of course, not inherently impossible there is a problem in so far as the latter are not intuitively derivable from the teoretical construct, but depend at various stages on the introduction of further value judgements. It begins with the ruling out of equity as choice as a guide to allocation of treatment, because health professionals are judged nor to be able to undertake such decisions. Rather, it is suggested that the criterion should only be applied to decisions on individual or community financing of treatment. It is shown that in this case applying equity as choice would yield the development of a perfectly competitive insurance market as the optimal policy. Confronted by the extremeness of this implication, which would leave the poor and the risk-averse uninsured, Le Grand suggests a role for exogenous compensation and opts for a pragmatic solution where a government agency levies a uniform charge on all individuals. None of these steps are logically derivable from the account. They are simply the result of further value judgements being introduced, because the probable outcomes are viewed as inequitable! This problem arises, of course, because the concepts of choice and constraints have been vaguely defined. Thus it is possible to transform what is apparently a precise conception into one where at every stage new value judgements are introduced if outcomes appear unfair. The dividing line between variables over which individuals can exercise choice and those which constitute constraints must, therefore, be the subject of careful definition in future.

#### 3.8 — Egalitarianism

Returning to classical notions of justice, we come across one — designated by the term Egalitarianism — which is often supported by Socialists ([7]).

---

([7]) Egalitarianism provides the most direct philosophical basis for the definitions of health-equity, identified in part 2 as being the aims of Portugal's health system.

This is sometimes taken to mean equalizing individual net benefits (i. e., health status) or, once it is admitted that some attributes cannot be physically distributed, equalizing individual opportunities for such benefits. Lengthy discussions of the distinctions possible within this approach and the competing policy objectives which they imply have been a feature of recent contributions to the health and social policy literature ([8]). The question of relating egalitarian policy-specific definitions to their economic or philosophical base has, however, been virtually ignored. In economics important contributions have been made on the specification of egalitarian objectives ([9]), yet one cannot help but feel that the lack of rigorous and consistent health-related analyses is due to egalitarianism as a principle of distribution remaining too elusive a concept.

More questions seem to be posed by the account than are answered. Consider, for example, Dworkin's (1981) influential discussion of equality of welfare and quality of resources ([10]). In the health field does equality of welfare require equality of health or attainment of equal levels of utility? Does equality of resources require simply equality of access (or opportunity of access) or does it require the use of resources in equal quantities? Should the definitions be applied in relation to State provided health care or across all resources, public and private?

#### 3.9 — Equality of basic capabilities

It seems fruitless to prolong the search for a conceptual grounding for equitable health policy within egalitarianism. I whould suggest that a more promising formulation of equity concerns is to be found in Sen's concept of basic capabilities (Sen, 1980, 1985). It provides a clarification of the debate on whether resource or welfare equalization should be the object of policy by examining thoughtfully the transmission process from commodities (resources) to final outcomes (welfare) and arguing that it is the capability people have to transform commodities into human functionings (such as being able to work) which matters. The approach has been shown to be useful for the study of poverty issues (Sen, 1983) and more generally for the definition and measurement of the standard of living (Sen, 1987). I should like to argue that basic

---

([8]) See O'Higgins (1987) for an interesting discussion and also Le Grand (1982) and Mooney's (1983) well-known contributions.

([9]) See, for example, Atkinson, 1982, Klappholz, 1972, and Roemer, 1986.

([10]) For Dworkin, equality of welfare holds that «a distributional scheme treats people as equals when it distributes or transfers resources among them until no further transfer would leave them more equal in welfare». Equality resources, in contrast: «treats them as equals when it distributes or transfers resources so that no further transfer would leave their share of total resources more equal» (Dworkin, 1981, pp. 185-186).

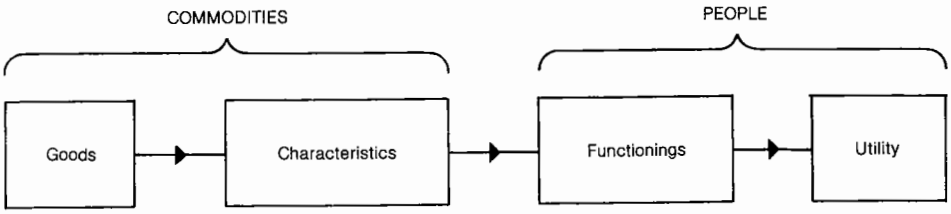
capabilities is a novel way of specifying health equity objectives, how we should go about attaining them and how progress should be monitored, while at the same time sharing some common themes with mainstream health economics. It thus warrants much closer attention by economists with an interest in the health inequality debate.

Sen's rationalization for focusing on basic capabilities actually derives from weaknesses inherent in the Rawlsian and Utilitarian approaches. The first is said to suffer from goods fetishism: a focus on the goods rather than what they can do for people. To take the example of health care, it is generally acknowledged that people do not demand the good in itself, bur rather for what it may contribute to health. It is the opportunities it provides for pursuing a healthy life which matters. Utilitarianism is, of course, concerned with what goods do to people, but it uses a measure which overly focuses on mental and emotional reactions to those goods. Arguably, non-utility information is equally as important and this requires that the central focus of analysis be on a much wider range of variables which explain what commodities do for people and how people use them to produce human activities.

The argument can be exemplified through figure 2, which shows the chain from goods to utility. On the left hand side is the world of commodities, which has been the traditional focus of economics when discussing questions of distribution (i. e., the non-envy approach). These commodities are transformed into more fundamental intermediate products, which Sen in common with Lancaster's (1966) pioneering approach calls characteristics. A focus on characteristics would lead one to interpret the demand for health care as a demand for factors such as clinical efficacy, caring by the GP and so on. Moving to the world of people, how individuals use characteristics of goods to produce human activities is described by Sen as functionings (i.e., earning one's living, following leisure pursuits, being in good health, etc.). Most economists would typically regard the link from functionings to utility as unproblematic. Sen disagrees arguing that although higher levels of utility are associated with better functionings the connection is by no means straightforward. For instance, suppose we were faced with the problem of distributing resources between Ana, who despite being physically disabled has an invariably optimistic disposition, and Bernardo, who suffers from no particular ailment, has a high marginal utility of income, but is essentially pessimistic at heart so that in terms of total utility he is actually worse off than Ana. Focusing on utility would lead to a preferential allocation to Bernardo, which does not seem very fair. The reason is, of course, that what most would acknowledge to be Ana's greater needs no-where figure in the analysis. Concentrating on functionings, on the other hand, makes the interpretation of need paramount and allows it to be incorporated as non-utility information. There are echoes here of the long standing advertence by health economists that needs must be seen as instrumental to the accomplishment of a desired end-state (in the example above, being able to move from one place to another) and that the success of health policy should be measured «in terms of changes in individual attributes» (Culyer, 1980).

FIGURE 2

**The chain from goods to utility**



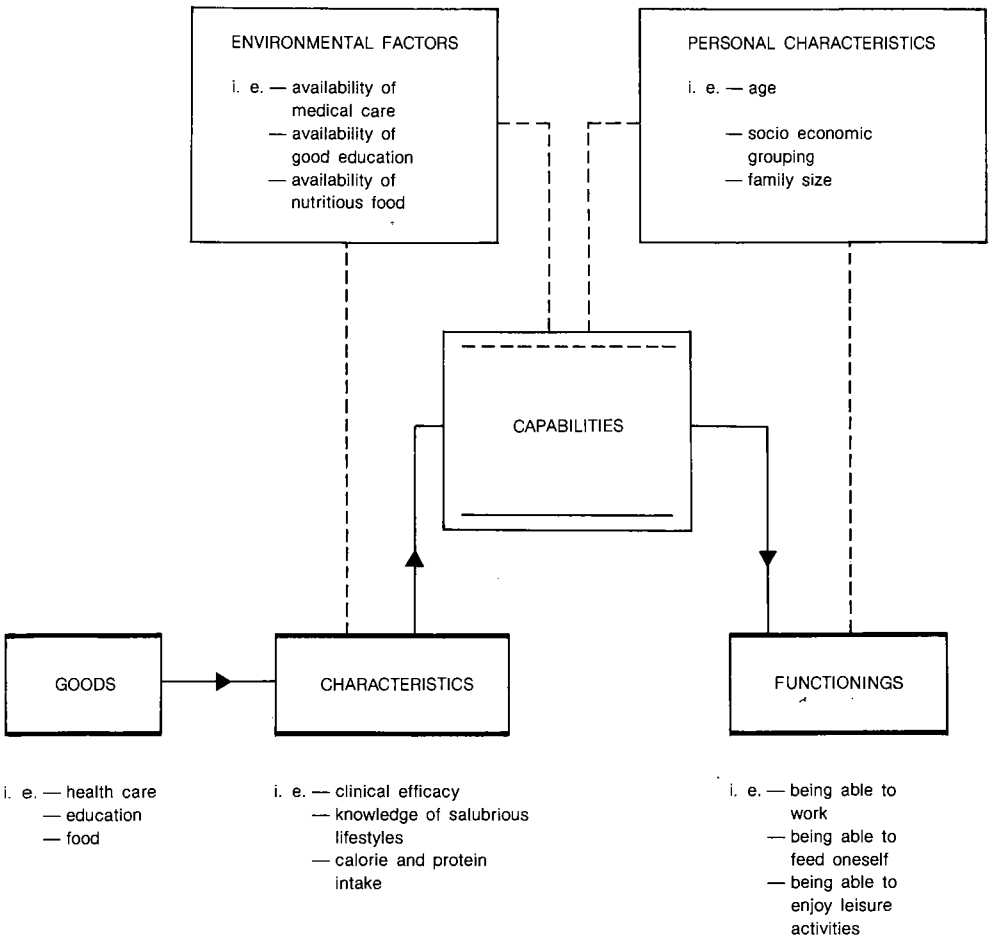

**Source:** Sen (1980).

Sen further argues that in terms of equity our interest is less in whether a person is functioning in a certain way and more on whether that individual has the capability to do so. Hence the guiding equity principle being «equality of basic capabilities». This argument is reflected in health-equity concerns where policy objectives are usually stated in terms of a person's access to health care rather than their utilization. A focus on functionings could imply that a person should be continuously using medical services, whereas the crucial idea is that they should be able to, when they choose so to do.

An application of basic capabilities to health suggests that we should be interested in those functionings which are provided by good health (i. e., the ability to work, to enjoy life, etc.). Health status would then depend on the capabilities to function which people have available to them (fig. 3). These capabilities are in turn determined by goods (i. e., health care, education, food) or more directly by the characteristics of goods (clinical efficacy, knowledge of salubrious lifestyles and calorie and protein intake, for example). In an important sense the characteristics of goods are related to environmental factors (availability of medical care, good education, and nutritious food, for example) and personal characteristics (i. e., age, socio-economic, grouping, family size, etc.). Thus whether an individual is capable of achieving good health will depend on his access to health producing goods and his endowment of health producing functionings, which is itself partly determined by access to commodities. In short, with regard to equity, equality of capabilities implies equal access to health. In section 2 I suggested that the health-equity objective implicit in Portugal's Constitution is equal access to the commodities which affect health. Sen's formulation provides, I would suggest, a richer interpretation of that objective while at the same time highlighting the inadequacy of intuitive definitions (i. e., the over-concentration on commodities themselves rather than what they can do for people).

FIGURE 3

**The production of health in Sen's basic capabilities framework**



There are also important implications in Sen's approach for economic analysis. It has much in common with models of household production which derive from Becker (1965). This work has considered the importance of inputs such as time and environmental constraints in the production of fundamental utility-yelding commodities. In Grossman's (1972) model of the demand for health individuals produce durable health capital which may be accumulated and at the same time may require maintenance through investment in non-genetic human characteristics and the characteristics of goods. The fundamental commodities produced by households —being able to work, to enjoy life, etc.— coincide for all intents and purposes with Sen's functionings. What distinguishes them is that writers in the human capital tradition would normally not consider the link from functionings to utility as problematic. Sen, on the other hand, emphasizes that any two individuals, or the same individual at different times, may make identical choices when faced with the same capability set and yet may experience quite different utility levels. Therefore our focus should be on the capability set. Muellbauer (1987) argues that in empirical analysis this problem is not unsurmountable: «What is important is that the relationships determining the capability set are relatively universal and that the determining variables and the chosen functionings are relatively observable.»

Therefore, there seems to be much in Sen's formulation to recommend it and also an idea of how it might usefully be applied in positive analysis. As in Le Grand's equity as choice framework, however, inevitable problems will be raised in the definition of what is attributable to choice (i. e., individual tastes) and what to constraints (in the Sen framework, the capability set). There is an implicit argument that in the case of capabilities to achieve basic functionings (such as good health) the role of choice will be restricted, although many would probably want to give it more prominence than Sen. Culyer (1987) puts his finger on the problem when he suggests that it may be more prudent to use general notion of the «characteristics of people» rather than «basic capabilities» since the former does not exclude *a priori* some characteristics (whatever they may be) whereas the latter clearly does. Ultimately, one would need to look at what a particular society reveals as being important. Although this is a thorny exercise the type of discussion put forward in section 2 on the equity objectives of Portugal's health system could lead us nearer the answer.

## 4 — Concluding comments

In this article I have reviewed normative aspects of the health inequality debate which only very recently have begun to be adressed by economists and other social scientists. This is despite wide agreement that grasping their implications is a prerequisite for understanding why people are concerned about inequality, how it should be measured, what causes it and how policies may be formulated and monitored. Although I have sought primarily to identify economic conceptions of equity which reflect the objectives of Portugal's health

system, the discussion is also relevant to other countries. Far too much research on health inequalities has tended to put the cart before the horse, identifying unequal distributions without considering if they are at the same time inequitable. It would be heartening to see future empirical work either preceded or related to the health equity objectives which particular countries reveal.

Portugal has in recent years adopted egalitarian health policy goals. Of the principles of distribution reviewed, Sen's basic capabilities appears the most fruitful in interpreting such objectives. Strangely, thus far it has been virtually ignored by health economists. Future work should devote greater attention to establishing its theoretical foundations in the health sphere and above all to developing the link between normative and positive analysis. The same may be said of other principles recently put forward in the literature (i. e., the equity as choice and QALY maximization approaches). Above all, I hope this review shows that the study of normative aspects surrounding the inequality in health debate should not be disregarded; and that economists have a particularly important role to play in this area, given longstanding traditions in welfare economics in analysing the concept of equity.

## 5 — References


ASSEMBLEIA DA REPÚBLICA (1979), *Serviço Nacional de Saúde,* Direcção dos Serviços de Documentação e Informação Bibliográfica, Lisboa.

ARROW, K. (1974), «Gifts and exchanges», *Philosophy and Public Affairs,* vol. 1, no. 4, pp. 343-362.

ATKINSON, A. B. (1982), *Social Justice and Public Policy,* Harvester Press, Brighton.

BECKER, G. (1965), «A theory of the allocation of time», *Economic Journal,* vol. 75, pp. 493-677.

BIRCH, S. (1987), *The Demand for Health: Extensions to the Human Capital Model,* Unpublished DPhil thesis, University of York.

*Constituição da República Portuguesa,* 1.ª revisão (1982), Rei dos Livros, Lisboa.

CULYER, A. J. (1971), «Medical care and the economics of giving», *Economica,* vol. 38, no. 51, pp. 295-303.

—— (1980), *The Political Economy of Social Policy,* Martin Robertson, Oxford.

—— (1987), «Commodities, characteristics, capabilities, utilities and the quality of life», paper presented to the IRISS Conference 1987, University of York, 11-12 November.

DANIELS, N. (1981), «Health care needs and distributive justice», *Philosophy and Public Affairs,* vol. 10, no. 2, pp. 146-179.

DARDANONI, V., and WAGSTAFF, A. (1987), «Uncertainty, inequalities in health and the demand for health», *Journal of Health Economics,* vol. 6, no. 4, pp. 283-290.

DHSS (1980), *Inequalities in Health,* report of a research working group chaired by Sir Douglas Black, DHSS, London.

DWORKIN, R. (1981), «What is equality?», *Philosophy and Public Affairs,* vol. 10, no.[s] 3 and 4, pp. 185-246 and 283-345.

ENSP/WHO (1987), Meeting of Principal Investigators on Inequities in Health, Lisbon, 28-30, September 1987, Escola Nacional de Saúde Pública.

ENTHOVEN, A. (1980), *Health Plan: The Only Practical Solution to the Soaring Cost of Medical Care,* Addison-Wellesley, Reading, Mass.

FELDMAN, A. M. (1987), «Equity», in J. Eatwell, M. Milgate and P. Newman (eds.), *The New Palgrave: A Dictionary of Economics,* MacMillan, London.

GROSSMAN, M. (1972), *The Demand for Health: A Theoretical and Empirical Investigation,* National Bureau of Economic Research, New York.

HOCHMAN, H. H., and ROGERS, J. D. (1969), «Pareto-optimal redistribution», *American Economic Review,* vol. 59, no. 3, pp. 542-557.

ILLSLEY, R., and SVENSSON, P.-G. (1986) (eds.), *The Health Burden of Social Inequities,* WHO Regional Office for Europe, Coppenhagen.

KLAPPHOLZ, K. (1972), «Equality of opportunity, fairness and efficiency», in M. Peston and B. Corry (eds.), *Essays in Honour of Lord Robbins,* Weidenfield and Nicolson, London.

LANCASTER, K. J. (1966), «A new approach to consumer theory», *Journal of Political Economy,* vol. 74, pp. 132-157.

LE GRAND, J. (1982), *The Strategy of Equality: Redistribution and the Social Services,* George Allen & Unwin, London.

—— (1984), «Equity as an economic objective», *Journal of Applied Philosophy,* vol. 1, no. 1, pp. 39-51.

—— (1987), «Equity, health and health care», in *Three Essays on Equity,* Sun-Tory Toyota International Centre for Economics and Related Disciplines: Welfare State Project. Discussion paper no. 23. London School of Economics and Political Science.

LINDSAY, C. M. (1969), «Medical care and the economics of sharing», *Economica,* vol. 36, no. 144, pp. 351-362.

MAYNARD, A. (1987), *Economics and Government Policy: Health Care,* Open University, D345, Unit 14.

MOONEY, G. H. (1983), «Equity in health care: Confronting the confusion», *Effective Health Care,* vol. 1, no. 4, pp. 179-185.

—— (1987), «What does equity in health mean?», *World Health Statistics Quarterly,* no. 4.

MUELLBAEUR, J. (1987), «Professor Sen on the standard of living», in A. Sen, *The Standard of Living,* Cambridge University Press, Cambridge.

NOZICK, R. (1974), *Anarchy, State and Utopia,* Basic Books, New York.

O'HIGGINS, M. (1987), «Egalitarians, equalities and welfare evaluation», *Journal of Social Policy,* vol. 16, no 1, pp. 1-18.

PAZNER, E. A., and SCHMEIDLER, D. (1978), «Egalitarian equivalent allocations: A new concept of economic equity», *Quarterly Journal of Economics,* vol. 92, no. 369, pp. 671-687.

PEREIRA, J., CAMPOS, A. C., CORTÊS, M. F., and COSTA, C. (1987), «Equidade geográfica no sistema de saúde português», in A. C. Campos and J. Pereira (eds.), *Sociedade, Saúde e Economia,* ENSP, Lisboa.

PRESIDÊNCIA DO CONSELHO DE MINISTROS (1987), *Programa do XI Governo Constitucional,* Lisboa, Agosto.

RAWLS, J. (1971), *A Theory of Justice,* Harvard University Press, Cambridge, Mass.

ROEMER, J. (1986), «Equality of resources implies equality of welfare», *Quarterly Journal of Economics,* vol. 101, pp. 751-784.

SEN, A. (1973), *On Economic Inequality,* Clarendon Press, Oxford.

—— (1980), «Equality of what?», in *Choice, Welfare and Measurement,* Basil Blackwell, Oxford, 1982, pp. 353-369.

—— (1983), «Poor, relatively speaking», *Oxford Economic Papers,* vol. 35, pp. 153-169.

—— (1985), *Commodities and Capabilities,* North-Holland, Amsterdam.

—— (1987), *The Standard of Living,* Cambridge University Press, Cambridge.

SMITH, A. (1987), «Qualms about QALY's», *The Lancet,* vol. 1, p. 1134.

THUROW, L. C. (1976), *Generating Inequality,* MacMillan, London.

VARIAN, H. R. (1987), «Fairness», in J. Eatwell, M. Milgate and P. Newman (eds.), *The New Palgrave: A Dictionary of Economics,* MacMillan, London.

WEST, P. (1981), «Theoretical and practical equity in the National Health Service», *Social Science and Medicine,* vol. 15C, no. 2, pp. 117-122.

—— (1986), «What is wrong with QALY's?», paper presented to a meeting of the Health Economists Study Group, University of York, January.