Policy and Practice

Theme Papers

Poverty and health sector inequalities*
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Abstract Poverty and ill-health are intertwined. Poor countries tend to have worse health outcomes than better-off countries. Within countries, poor people have worse health outcomes than better-off people. This association reflects causality running in both directions: poverty breeds ill-health, and ill-health keeps poor people poor. The evidence on inequalities in health between the poor and non-poor and on the consequences for impoverishment and income inequality associated with health care expenses is discussed in this article. An outline is given of what is known about the causes of inequalities and about the effectiveness of policies intended to combat them. It is argued that too little is known about the impacts of such policies, notwithstanding a wealth of measurement techniques and considerable evidence on the extent and causes of inequalities.

Keywords Poverty; Health status; Income; Health services accessibility; Financing, organized; Social justice (source: MeSH, NLM). Mots clés Pauvreté; Etat sanitaire; Revenu; Accessibilité services santé; Organisation financement; Justice sociale (source: MeSH, INSERM). Palabras clave Pobreza; Estado de salud; Renta; Accesibilidad a los servicios de salud; Organización del financiamiento; Justicia social (fuente: DeCS, BIREME).

Introduction

Poverty and ill-health are intertwined. Poor countries tend to have worse health outcomes than better-off countries. Within countries, poor people have worse health outcomes than better-off people. The association between poverty and ill-health reflects causality running in both directions. Illness or excessively high fertility may have a substantial impact on household income (1, 2) and may even make the difference between being above and being below the poverty line (3). Furthermore, ill-health is often associated with substantial health care costs (4). But poverty and low income also cause ill-health (5). Poor countries, and poor people within countries, suffer from a multiplicity of deprivations that translate into high levels of ill-health (6, 7). Poor people are thus caught in a vicious circle: poverty breeds ill-health, ill-health maintains poverty (Fig. 1).

Several key international organizations and bilateral donors now have the improvement of the health outcomes of the world’s poor as their primary objective (8–10). This reflects an increasing tendency of such organizations to define their goals in terms of poverty reduction (11, 12) and an ever broader interpretation being given to the term “poverty” (6, 13). However, it also reflects growing agreement that inequalities in health outcomes between rich and poor are unjust and unfair (14), not because the poor are somehow more deserving than the better-off but because these inequalities evidently correspond to widely differing constraints and opportunities facing the poor and better-off rather than a tendency for the two groups to make different choices (15–20). The deleterious effects that ill-health has on household living standards are also increasingly seen as an issue of social justice, possibly reflecting a view that the income losses and health care payments associated with ill-health are involuntary and simply the consequence of unwanted health “shocks” (21). This sets health expenditure apart from most other items in household budgets and leads naturally to the view that the community as a whole should bear the financial burden of such shocks, instead of allowing them to impact adversely on income inequality and poverty. In several countries in the Organisation for Economic Co-operation and Development (OECD) (22) and apparently elsewhere (23) there appears to be an acceptance of the view that both out-of-pocket payments and payments towards protection schemes should be linked to household income, a view that WHO has recently championed (24).

This paper provides an overview of research relating to inequalities in health to the disadvantage of the poor, and to changes in impoverishment and income inequality associated with payments for health care. The broader issue of impoverishment associated with income loss through ill-health is not considered because the creation of schemes to protect

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people from such loss goes beyond the area of health policy as currently interpreted. Nevertheless, it should be noted that lost income is probably a larger cause of impoverishment than out-of-pocket payments for health services. The evidence on health inequalities and impoverishment is discussed, together with the factors driving the results and the effectiveness of policies in these areas.

Evidence of health inequalities between the poor and non-poor

In Europe there has been a long tradition of measuring socioeconomic inequalities in health, covering both methodology and empirical analysis. Less empirical work has been undertaken on the subject in other regions, especially in the developing world.

The following key findings in the literature on empirical data are worth highlighting. Firstly, inequalities in health are almost always to the disadvantage of the poor. The poor tend to die earlier and to have higher levels of morbidity than the better-off. Secondly, inequalities tend to be more pronounced for objective indicators of ill-health, such as anthropometric measures of malnutrition and mortality, than for subjective indicators. A good deal is known about what they are and their etiology. They vary widely between households and they tend to be worse in poor households than in better-off households. At one level this explains why there are socioeconomic inequalities in health and why they disfavor the poor. However, the inequalities in the proximate determinants of health vary between determinants and, like inequalities in health itself, also vary between countries.

Fourthly, socioeconomic inequalities in health seem to be widening rather than narrowing. This is true of both the developing and industrialized world.

Causes of health inequalities: proximate determinants

Fig. 2 outlines an approach to conceptualizing the various routes by which health outcomes are determined. It provides a framework for understanding health inequalities between the poor and the better-off.
utilization is sufficient (60–65). The picture is quite different in the developing world. Poor children in poor countries are typically far less likely to be immunized than better-off children (39). This is so even in countries with a national immunization programme under which services are provided free at the point of use (66). The utilization of oral rehydration therapy is lower among poor children than among the better off, even though the incidence of diarrhoea is greater among the poor (39). In those countries where the use of oral rehydration therapy is higher among the poor, the inequality is far smaller than the inequality in the incidence of diarrhoea.

The failure of health services to reach the poor in developing countries, despite their higher disease burden, is not just a matter of the better-off using their higher incomes to purchase care from the private sector. The poor also receive less of government subsidies to the health sector (67–71). The bias in favour of the rich is especially pronounced in the hospital sector, which benefits from the largest part of government spending. However, a few developing countries apparently manage to achieve pro-poor distributions of public spending on health care, e.g. Costa Rica and Malaysia (47). In India, the State of Kerala manages to secure a roughly even distribution of health subsidies across income groups (72).

Less quantitative evidence seems to be available on the degree of inequality in other proximate determinants of health. The prevalence of breastfeeding is often higher among lower socioeconomic groups (48) but this does not seem to be true of the other proximate determinants of child health. Levels of alcohol consumption are higher among the lower socioeconomic groups in several countries of eastern Europe, Finland, and France (73). Smoking and poor diet tend to be concentrated among the lower socioeconomic groups in the United States of America and northern Europe but not in southern Europe and France (73). Among black people in South Africa, smoking is positively associated with socioeconomic status, whereas among white people the opposite is true (74).

### Contributions of inequalities by proximate determinants

Knowing simply that the distribution of one or other proximate determinant disfavours the poor does not tell us how important this inequality is as part of the explanation of health inequalities. The contribution to inequality in health by a particular proximate determinant depends partly on its distribution across socioeconomic groups and partly on its impact on health (52). The Whitehall study of British civil servants assessed the relative contribution of inequalities in the various proximate determinants of health to inequalities in health. North et al. (75) tried to explain the strong inverse relation between grade of employment and absence from work because of sickness. Several risk factors were identified, including health-related behaviours, work characteristics, low

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Fig. 2. A conceptual framework for understanding health inequalities
levels of job satisfaction, and adverse social circumstances outside work. Standardization methods showed that inequalities in these risk factors accounted for only a third of the differences in such absence between grades. Marmot et al. (76) undertook a similar exercise looking at coronary heart disease.

Causes of health inequalities: underlying determinants

Why are there inequalities in the proximate determinants of health? Fig. 2 shows the influences of household resources, community factors, and health system determinants. In each of these underlying determinants of health (77, 78) the poor tend to be disadvantaged.

How do underlying determinants vary across socioeconomic groups?

Income and assets, whose inequalities vary widely by country (79), are a key component of household resources. In developing countries under otherwise constant conditions, higher income is associated with more frequent and more intensive use of health services in both the private and public sectors (67); the use of modern health care providers rather than traditional practitioners (67); and the number of children a woman has and the age at which she has her first child. Most dietary and child-feeding practices also improve with higher levels of income, as do sanitary practices (e.g. handwashing and disposal of faeces). The human assets of higher levels of income, as do sanitary practices (e.g. income, housing, the availability of safe drinking-water, and sanitation) together accounted for a large share of health inequality.

Contributions of inequalities by underlying determinants

As with the proximate determinants of health, knowing simply that the distribution of one or other underlying determinant disfavours the poor does not indicate how important this inequality is as part of the explanation of health inequalities. The method used in the Whitehall study (75) is one way of tackling this issue. Another is to use decomposition analysis, linking the inequalities in the various determinants of health, via a regression model of the determinants of health, with a measure of inequalities in health (52).

Community factors

With regard to community factors it is important to consider environmental and geographical influences. It is comparatively difficult to reach a health centre if roads are impassable during the rainy season. The environment also matters. Good sanitary practices are relatively difficult to maintain if the conditions of water supply and sanitation in the local community are poor. Communities often share similar values and norms, which, through peer pressure, often play a large part in shaping health behaviours (81). At the community level, as at the household level, the poor are likely to be disadvantaged. For example, they are more likely to live in remote areas. In poor communities, moreover, social pressures among teenagers tend to be strongest and attitudes towards women tend to be least favourable to good health outcomes (81).

There is a good deal of evidence on the impacts of health system determinants on health outcomes and health service utilization. Availability, possibly defined in terms of staff in local health facilities, often emerges as an important determinant of service utilization and health outcomes (82–84). Accessibility, i.e. the ease with which people can reach facilities, is also important. Travel time is significant in this connection: it depends on the distance people have to travel, the transport system, road infrastructure, and geographical factors. Distance is the most frequently encountered variable in empirical studies of utilization and often has a significant impact on it (82, 85–88). A higher money price tends to reduce or at least delay utilization, especially among the poor, unless accompanied by improvements in service quality (89, 90). Insurance tends to raise the usage of health services (91, 92). Quality, or, more exactly, perceived quality, also increases the demand for health services (82, 88, 89, 93). In most of these areas the poor are disadvantaged. They tend to have to travel further (93) and for longer periods (67) in order to reach health facilities. The quality of care, interpreted broadly to include service and amenities as well as technical quality, also tends to be comparatively low in facilities serving the poor (87). The poor, who are the most price-sensitive users of health services, frequently face a higher price at the point of use because they are less likely to have insurance coverage, whether private (91) or public (94). This tendency is sometimes offset by fee-waiver schemes, although in practice these often have the effect of exempting the near-poor rather than the poor (90, 94, 95).

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Poverty and paying for health care

In addition to its concern for improving the health of the poor, the international development community is also concerned with the impact of the costs of health care and lost income on a household’s ability to purchase things other than health care. In other words, in addition to the desire to ensure that health improvements occur, especially among the poor, there is a desire to ensure that achieving this does not lead to an excessive decline in the living standards of the households involved.

There are various possible ways in which to interpret these concerns (27). One is that the distribution of health care costs should not be such as to increase income inequality. Regressive payments, i.e. payments that absorb a larger share of a poor household’s prepayment income than that of a rich household’s, violate this requirement. Out-of-pocket payments are regressive in most OECD countries (98, 99) and in some developing countries, including rural Bangladesh (100), Burkina Faso (101), China (102), Paraguay (101), Sierra Leone (103), and Thailand (104). In several developing countries, however, they are either proportional to income, as in Viet Nam (21, 105), or progressive, as in Guatemala (101), India (72), Mexico (106), Nepal (107) and South Africa (101). In the first group of countries the poor apparently use services but pay a large share of their income for them, while in the latter group it is primarily the better-off who use and pay for health services. A concern over the regressivity of out-of-pocket payments overlooks the possibility that this might be offset, at least in part, by progressivity in prepayments, i.e. taxes, social insurance contributions and private insurance premiums. In many OECD countries the progressivity of these indirect payments is, in fact, more than sufficient to offset the regressivity of direct payments (98).

A second interpretation of these concerns over health care payments is that households should not have to spend more than a specific percentage of their income on health care, payments above this threshold being classified as catastrophic (21). In several countries more than 1% of all households recently spent half or more of their non-food expenditure on health care (24). Another recent study explored trends in catastrophic health spending in Viet Nam, and found that irrespective of the cut-off point used and irrespective of whether spending was calculated as a share of total or non-food expenditure, the proportion of the population making catastrophic payments fell between 1993 and 1998 (21).

A third interpretation is that health care costs should not drive households into or further into poverty. The poverty impact can be measured by the change in the poverty head count (i.e. the proportion of the population in poverty), or the change in the poverty gap (i.e. the average shortfall from the poverty line), induced by health care payments (21). With the poverty gap it is possible to distinguish between already poor people becoming even poorer and previously non-poor people becoming poor. Calculations along these lines suggested that out-of-pocket spending on hospital care might have raised the head count in India by 2% (72), and that, for a food-based poverty line, overall spending on health care in Viet Nam might have added approximately 4.4% to the head count in 1993 and 3.4% in 1998 (21). The impact on the poverty gap in Viet Nam was a good deal smaller than the impact on the head count (1.4% and 0.8% in 1993 and 1998 respectively) and three-quarters of this impact was attributable to already poor people becoming even poorer. Most of the poverty impact of out-of-pocket payments in Viet Nam was attributable to non-hospital expenses.

Health sector inequalities and public policy

Broad-brush studies of policy effects

In a comparative study of nine OECD countries it was found that inequality in self-assessed health was not significantly associated with total health care expenditure per capita, the percentage spent publicly, or gross domestic product per capita, but was positively and significantly associated with income inequality (36). However, in another investigation in which aggregate data from developing countries and a decomposition approach were used, it was found that public spending on health had a larger impact on child mortality among the poor than among the non-poor, and hence served to reduce health inequality (108). In another comparative study it was found that differences between OECD countries in the extent of inequality and inequity in health care utilization partly reflected differences in how the poor and better-off fared with respect to user fees, but not in the extent of insurance coverage (63). This study also found evidence that the distribution of utilization across income groups reflected some characteristics of the delivery system, e.g. how providers were paid, but not others, e.g. the presence of a general practitioner gatekeeper scheme. In another study of OECD countries it was reported that the progressivity of combined direct and indirect health care payments closely reflected the financing mix of the system. In tax-financed systems, payments tended to be broadly proportional to income; in social insurance systems, they tended at worst to be mildly regressive but were sometimes proportional or even slightly progressive; and in predominantly privately financed systems, payments tended to be regressive (98).

Effects of specific programmes

Yip & Berman (109) examined inequalities in insurance coverage between poor and better-off children under Egypt’s School Health Insurance Programme (SHIP). They also exploited exogenous differences in health insurance coverage in order to assess the programme’s impact on the distribution of both health service utilization and out-of-pocket payments. Although SHIP was intended to cover all children in education, i.e. those aged 6–18 years, at the time of the survey some children attending school had not yet been covered. These children provided a control group but the authors used regression analysis to control for other differences between children who were covered and those who were not covered. SHIP coverage rose with income, mostly because poorer children were less likely to be in school but also because children who were in school but not yet covered were more likely to be poor. SHIP coverage increased the probability of a visit to a formal health care provider for all income groups but there was an especially large impact among children in the poorest quintile. SHIP coverage resulted in lower out-of-pocket payments for all income groups but the impact was very much smaller in the poorest and richest quintiles than in the middle of the income distribution.

Victora et al. (48) presented evidence on Ceara’s maternal and child health programme in Brazil, which aimed specifically to narrow health inequalities. Substantial improvements were observed in average levels of service usage and outcomes.
Pauvreté et inégalités dans le secteur de la santé

Pauvreté et mauvaise santé vont de pair. Les pays pauvres tendent à avoir de plus mauvais résultats dans le domaine de la santé que les pays plus nantis, et à l’intérieur d’un même pays les pauvres ont une moins bonne santé que les riches. Cette association révèle une relation de causalité à double sens : la pauvreté engendre la mauvaise santé, et la mauvaise santé entretient la pauvreté. Le présent article expose les faits concernant les inégalités de santé entre pauvres et non-pauvres et les conséquences des dépenses de...
La pobreza y la mala salud son fenómenos interrelacionados. Los paises pobres tienden a presentar peores resultados sanitarios que los más pudientes, y dentro de cada país las personas pobres tienen más problemas de salud que las acomodadas. Esta asociación refleja una relación de causalidad que funciona en los dos sentidos: la pobreza genera mala salud, y la mala salud hace que los pobres sigan siendo pobres. En este artículo se examina la evidencia disponible respecto a las desigualdades sanitarias entre las personas pobres y las que no lo son, así como respecto a las repercusiones que en forma de empobrecimiento y desigualdad de ingresos pueden tener los gastos en atención de salud. Se hace una exposición sucinta de los actuales conocimientos sobre las causas de las desigualdades y sobre la eficacia de las políticas destinadas a combatirlas, y se señala que es demasiado poco lo que se sabe acerca de los efectos de esas políticas, pese a las abundantes técnicas de medición disponibles y a los muchos datos obtenidos sobre la magnitud y las causas de las desigualdades.

References