Priority setting in the health sector: Why is a good cause-of-death reporting system important?

PRASANTA MAHAPATRA

INTRODUCTION

Real operations of a health system, on a daily basis, treat certain problems, meet certain requirements and bypass others. Priorities are set explicitly or implicitly. It is important to recognize that health sector priorities are ultimately set through social and political processes. Linkages between the health policy and the social and political processes have been well documented. Analytical approaches to priority setting operate within the sociopolitical environment and modify it by changing people’s information set. On the other hand, social and political interests may engender the development of specific analytical approaches. Although expressions such as ‘priority setting techniques’ and its minor variants are used in health policy literature, they actually refer to technical and analytical aids to priority setting. This semantic distinction is important, since some criticism of specific aids to priority setting arise from an apprehension that they are formulaic. The expression ‘health priority setting’ used here means analytical aids to priority setting in the health sector.

Analytical aids to priority setting consist of processes and criteria. Priority setting criteria refer to the variables considered relevant for the ordering of alternative choices. For example: age, sex and capacity to benefit from treatment have been used as priority setting criteria. Priority setting processes refer to the procedure followed to arrive at the criteria and the application of chosen criteria to specific data. Both procedural justice and shared criterion of fairness appear to be important for health priority setting. Analytical aids to priority setting can either be qualitative or quantitative. While this study is about quantitative aids to policy analysis, the usefulness of qualitative information, such as case studies, should also be kept in mind. At the macro level, two distinct forms of health priority setting can be distinguished: (i) systemic; and (ii) benefit package definition or rationing. Systemic priority setting is about health sectorwide policies. For example, allocation of financial and managerial resources between public health oriented interventions and clinical services; specialty profile of outputs from education and training institutions; technology assessment; regulatory policies to discourage undesirable activities and incentive regimens to encourage desirable services. Although systemic priorities would encourage certain services (such as the ones considered cost-effective) and discourage expensive services, there may still be scope for a few persons to receive the latter. In other words, systemic priorities act on the overall volume of services rather than specific cases. Rationing is implicit in systemic priority setting, although its application to individuals may vary. Explicit rationing, by definition of benefit packages, may be based on the same set of ethical principles and allocative criteria, but apply at an operational level.

OBJECTIVES AND METHODOLOGY

This study had two objectives. First, to assess the need for and importance of accurate cause-of-death (COD) statistics for an evidence- and information-based health policy and priority setting. Second, to explore the level of awareness, concern and commitment to the generation and use of reliable COD statistics in India. My motivation for this research has taken a cyclical course. I started looking for COD statistics to be able to estimate the burden of disease and found that in India these statistics are poorly developed. Then I questioned as to whether COD statistics are really essential or are there work-arounds. To answer my question, I reviewed major priority setting exercises to assess the importance of COD statistics. As these statistics were not so usable, I wanted to explore ways and means of improving them. So the methods for this study can be grouped into two:

1. Review of health priority setting exercises, a listing of data requirements and an assessment of the need for COD statistics.

2. A subjective report of the initial experience from our efforts to improve the COD reporting system in Hyderabad and Andhra Pradesh.

RESULTS

Aids to priority setting in the health sector

To understand the process and data requirements for health priority setting it will be useful to review actual priority setting exercises in the recent past. I have reviewed six such efforts undertaken during the 1980s and early 1990s. Two of these are country-specific (the USA and UK), two were undertaken by international agencies and two are global movements in support of an appropriate health system research environment. These are: (i) the domestic health policy consultation for the USA undertaken by the Carter Center; (ii) an interdisciplinary committee on health promotion constituted by a group of four healthcare organizations in the UK; (iii) a UNDP sponsored monograph on investing in health; (iv) the essential national health research (ENHR) movement; and (v) the Global Forum for Health Research. All these efforts were directed towards determination of systemic priorities. A large body of literature exists focusing on rationing and benefit package definition. A well known example of a priority setting exercise for rationing of health care is the Oregon experiment. This is not reviewed here for two reasons: (i) the present work is concerned with the developing country perspective; and (ii) the four efforts for systemic priority setting specifically reviewed here...
provide enough understanding of the role of quantifying disease burden for priority setting, which is the focus of this study.

Soon after its establishment in 1981, the Carter Center in the USA appointed a health policy task force to identify domestic problems in the health field. This task force identified a reduction in the size of disease burden, preventable or treatable with current technology as a priority. In effect, this was a full health sector priorities review. The emphasis was on generic risk factors (also referred to as precursors in the study report) for several health problems. The study was named 'Closing the gap'. Methodological details and the results of this consultation have been published. Major health problems in the USA were selected in September 1983 by an expert panel using 5 criteria: (i) point prevalence and temporal trends; (ii) severity of health impact and cost; (iii) sensitivity to intervention using current scientific or operational knowledge; (iv) feasibility of such interventions; and (v) generic applicability of such interventions to other health problems. The identified problem areas included alcohol dependency, arthritis, cancer, cardiovascular, respiratory, dental and digestive diseases, depression, diabetes mellitus, drug dependence, infectious and parasitic diseases, unintended pregnancy and infant mortality, and unintended injury and violence. The definition of these problem areas is so broad that real prioritization must depend on additional criteria and data sources used to study each of them. Each problem area was assigned to a consultant and an expert panel from different specialties, who followed a common data format (Table I) to quantify illness and its components attributable to specific risk factors. Four out of the groups of data relate to quantification of disease burden.

In 1985 a group consisting of four healthcare organizations in the UK sponsored a research fellowship in health promotion and appointed an interdisciplinary committee to guide the project. The main focus of this committee was to identify priorities for health promotion efforts. This committee listed three overall health goals and six criteria to identify health sector priorities. The three goals were attainment of (i) longevity, (ii) a good quality of life, and (iii) equal opportunities for health. The six priority setting criteria were: (i) need for action and strength of supporting evidence; (ii) feasibility or effectiveness of action and strength of evidence supporting it; (iii) public support and acceptability; (iv) professional support; (v) political support; and (vi) economic benefits. To identify the needs for action the committee explicitly analysed mortality patterns by broad age groups. Priorities for the reduction of mortality and improvement of quality of life were identified using the mortality analysis and group consensus. Top causes of current or emerging disease burden implicitly identified by the committee included circulatory diseases, cancers, sexually transmitted diseases, road safety, mental health, congenital abnormalities, prematurity and low birth-weight, vaccine preventable diseases and dental diseases in childhood.

Some time before 1988, the United Nations Development Program (UNDP) commissioned Julia Walsh to prepare a monograph on establishing health priorities in the developing world. Walsh reviewed the literature and held discussions with scientists and programme officers in the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), UNDP, World Bank, non-profit funding agencies and faculty from a few academic institutions. These consultations suggest an effort to structure the monograph contents around prevailing consensus about priorities in the health sector, even though no formal method of consensus was used. In the monograph she first takes stock of the burden of illness, relying mainly on causes of death. About 20 disease categories were identified as leading causes of illness and death in the world. She then listed available interventions, their cost and efficacy and discussed factors affecting effectiveness. Although the monograph does not give details about the manner in which estimates of mortality and intervention efficacy were gathered, it does bring out the sequence of analytical steps required for identifying priorities in health service provision and research.

The World Bank's World Development Report (WDR) 1993 was devoted to the importance of investments in health and priorities within the health sector. This report made use of two background studies: (i) the Global Burden of Disease (GBD) study (WDR 1993 Appendix-B) and (ii) the health sector priorities review. The GBD study quantified global burden of premature mortality and disability due to about 100 diseases. Diseases cumulatively accounting for more than 90% of premature deaths were included in the list. A new measure of population health status, the disability-adjusted life-year (DALY), was used. The health sector priorities review made use of the DALY as a common denominator to account for output from different health interventions. Each of the 25 specific diseases or disease clusters were taken up by multidisciplinary teams who studied the cost-effectiveness of available interventions.

The Commission on Health Research for Development (COHRED) adopted the term essential national health research (ENHR) to emphasize research on country-specific health problems to inform health policy formulation and prioritization of research to solve health problems of respective national populations. COHRED activities have catalysed efforts towards the estimation of disease burden and study of cost-effectiveness of interventions. Many ENHR discussions and studies in India have recognized the need for COD statistics to inform health policy or reveal lack of any funding for research on COD.

The Global Forum for Health Research was started in 1998, with its central objective to correct what is being referred to as the 10/90 gap in health research. This expression refers to the fact that 90% of current research investments are devoted to the medical and health problems of 10% of the world's population. One among the five key strategies adopted by the Global Forum is to promote analytical work for priority setting. This includes studies on burden of disease and health determinants. We have seen earlier that a key data requirement for burden of disease studies is the COD statistics.

Certain methodological characteristics appear common to all priority setting exercises in public health: (i) some form of quantification of disease burden; (ii) feasibility and cost-effectiveness

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**Table I. US 'Closing the gap' project: Common data format**

<table>
<thead>
<tr>
<th>Health outcome</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>Deaths, crude death rate, age standardized death rate, age specific mortality rates, years of potential life lost before the age of 65</td>
</tr>
<tr>
<td>Morbidity</td>
<td>Incidence rate, annual period prevalence, days of hospital care, hospitalizations, physician visits, days lost from work or major activity</td>
</tr>
<tr>
<td>Complications</td>
<td>Blindness, paralysis, amputation</td>
</tr>
<tr>
<td>Quality of life</td>
<td>Individual (disability, missed opportunity for education, training, employment), family (transportation to health facility, etc.), social (greater dependency, etc.)</td>
</tr>
<tr>
<td>Direct costs</td>
<td>Short stay hospital care, physician and other professional care, pharmaceuticals, special equipment and long term institutional care</td>
</tr>
</tbody>
</table>
of interventions; and (iii) reliance on consensus among experts. The role of disease burden estimates in priority setting needs elaboration. Evidently, a disease burden estimate is only one component of a priority setting exercise. Faced with disease burden estimates people quickly recognize the top causes of illness and develop the motivation to reduce them. This inevitably leads to the search for appropriate technologies and their cost-effectiveness. Considerations of technical and practical feasibility and cost-effectiveness of interventions play on the minds of policymakers (along with social, political and ethical considerations) to determine which causes of disease burden are targeted by the healthcare delivery system and which are the subject of further research. Thus, the primary role of a disease burden estimate is to set the agenda by creating concern and motivating policymakers. In addition, disease burden estimates provide benchmarks for future evaluation of the effect of healthcare interventions. Specific disease burden estimates are useful for cost-effectiveness analysis of interventions and health resource allocation modelling.

Improving COD reporting systems: First impressions

We have taken up some studies at the Institute of Health Systems (IHS), Hyderabad to improve the reliability and validity of COD statistics in Andhra Pradesh. These studies include the review and reinvestigation of COD reports from the SCD Rural System\textsuperscript{18,19} and the Medical Certification of Cause of Death\textsuperscript{20} scheme operational in urban areas. There appears to be total apathy towards COD reporting at all levels. Chiefs of clinical units do not appropriately emphasize the importance of writing up the COD report. Short term training programmes to build COD report writing skills will help improve a physician’s ability to do so. In addition to poor physician skills in COD report writing, non-maintenance or poor maintenance of medical records contributes to inaccurate assignment of COD. I hope that we can improve this situation by increasing awareness among medical and public health professionals about the need for reporting of COD. Given the inclination and a little bit of effort, we can help the country move forward and generate the required statistics for a health policy based on more reliable evidence than conjecture.

CONCLUSION

Valid and reliable statistics on COD are an essential input for setting of priorities in the health sector. The COD structure should directly lead to prioritization of medical and health research, so that research efforts are directed towards the top cause of death. The COD statistics is an important input for the computation of summary measures of population health status, which help to focus the attention of policymakers on important problems requiring solutions by healthcare delivery systems. Major initiatives to systematically identify health sector priorities have used information from the COD. However, professionals who are in a position to contribute to a reliable and valid COD reporting system will need to take a proactive role to emphasize its usefulness and take tangible action to improve the health policy analysis climate of the country.

REFERENCES

15. COHRED: Health Research—Essential Link to Equity in Development. Commission on Health Research for Development.