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

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Real operations of a health system, on a day to day basis, treat certain problems, meet specific requirements and bypass some other demands. Priorities are set explicitly or implicitly[2]. It is important to recognize that health sector priorities are ultimately set through social and political processes. Such linkages between health policy and the social political process have been fairly well documented (see for example; Walt 1994; Mckeown et al 1994; Carr-Hill 1991). Analytical approaches to priority setting, operating within the socio political environment, seek to modify and are modified by it. Although expressions like “priority setting techniques” and its minor variants are used in health policy literature, they actually refer to technical and analytic aids to priority setting. The semantic distinction is important, since a good deal of criticism of specific aids to priority setting arise from an apprehension that they are formulaic. Since the role of academia is to aid; through evaluation, research and analysis, the larger social political allocative process, use of the short expression "health priority setting" in academic literature without any qualifier should not cause any confusion.

Analytical aids to priority setting consist of processes and criteria (Goold 1996). Priority setting criteria refer to the variables considered relevant for ordering of alternative choices. For example: age, sex , capacity to benefit from treatment have been used as priority setting criteria. Priority setting processes refer to the procedure followed to arrive at criteria, and 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

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[2] Priorities may not be set at all and things may be allowed to drift, either due to bureaucratic habit or political corruption. The social political remedy for such a situation is to ask for explicitly set priorities and seek action conforming to those priorities. While this problem is more fundamental, the starting point for this work is that decision makers do recognise the need for priority setting and are willing for change.

analysis, usefulness of qualitative information, such as case studies, should also be kept in sight (Filstead 1981).

At the macro level two distinct forms of health priority setting can be distinguished, namely: (a) systemic and (b) benefit package definition or rationing. Systemic priority setting is about health sector wide 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 regimes to encourage desirable services. Although systemic priorities would encourage certain services (say the ones considered cost-effective) and discourage expensive services, there may still be scope for a few persons to receive the expensive services. 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.

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 four such efforts undertaken during the 1980s and early 1990s. Two of these are country specific (US and UK) and two were undertaken by international agencies. These are: (a) domestic health policy consultation for US undertaken by the Carter Center, (b) interdisciplinary committee on health promotion constituted by a group of four health care organizations in the UK, (c) UNDP sponsored monograph on establishing health priorities, and (d) the World Bank's World Development Report 1993 on investing in health. All these efforts were directed towards determination of systemic priorities. A large body of literature focusing on rationing and benefit package definition exists (see for example Malek 1994). A well known example of priority setting exercise for rationing of health care is the Oregon experiment (Strosberg et al. 1992). They are not reviewed here for two reasons, namely: (a) the present work is concerned with the developing country perspective and (b) the four efforts for systemic priority setting specifically reviewed here provide enough understanding of the role of quantifying of disease burden, which is the focus of this study, for priority setting.

Soon after its establishment in 1981, the Carter Center in the United States of America (US) appointed a health policy task force to identify domestic problems in the health field. This task force identified reduction in the size of disease burden, preventable or treatable with current technology as a priority. In effect this was full scale 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 as “Closing the gap”. Methodological details and results of this consultation have been published (Foege, Amler and White 1985; Amler and Dull 1987). Major health problems in the US were selected in September 1983 by an expert panel using five criteria, namely: (a) point prevalence and temporal trends, (b) severity of health impact and cost, (c) sensitivity to intervention using current scientific or operational knowledge, (d) feasibility of such interventions, and (e) generic applicability of such interventions to other health problems. Identified problem areas included: alcohol dependency, arthritis, cancer, cardiovascular diseases, dental diseases, depression, diabetes mellitus, digestive diseases, drug dependence, infectious and parasitic diseases, respiratory diseases, unintended pregnancy and infant mortality, unintended injury and violence. Definition of these problem areas are 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-1) to quantify illness and its component attributable to specific risk factors. Four out of the five groups of data relate to quantification of disease burden.

Table-1 US “Closing the gap” project - common data format.

Health outcome	Statistic
Mortality	Deaths, Crude death rate, age standardized death rate, age specific mortality rates, years of potential life lost before the age or 65.
Morbidity	Incidence rate, annual period prevalence, days of hospital care, hospitalizations, physician visits, days lost from work or major activity.
Complications	Blindness, paralysis, amputation.
Quality of life	Individual (disability, missed opportunity for education, training, employment), Family (transportation to health facility etc.) Social (greater dependency etc.).
Direct costs	Short stay hospital care, physician and other professional care, pharmaceuticals, special equipment and long term institutional care.

In 1985 a group consisting of four health care organizations[3] in the United Kingdom (UK) sponsored research fellowship in health promotion and appointed an interdisciplinary committee to guide the project (Smith and Jacobson 1988). 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 (a) longevity, (b) a good quality of life, and (c) equal opportunities for health. The six priority setting criteria were: (a) need for action and strength of supporting evidence, (b) feasibility or effectiveness of action and strength of evidence supporting it, (c) public support and acceptability, (d) professional support, (e) political support, and (f) economic benefits. To identify needs for action the committee explicitly analyzed mortality patterns by broad age groups. Priorities for 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 include: circulatory diseases, cancers, sexually

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[3] The Health Education Council named The Health Education Authority from April 1987, King Edward’s Hospital Fund for London, The London School of Hygiene and Tropical Medicine and The Scottish Health Education Group.

transmitted diseases, road safety, mental health, congenital abnormalities, pre maturity 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 1988). Walsh reviewed literature, discussed with scientists and program officers in the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), UNDP, World Bank, non profit funding agencies and faculties from a few academic institutions. These consultations suggest an effort to structure the monograph contents around prevailing consensus about priorities in health sector, even though no formal consensus method 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 (World Bank 1993). This report made use of two background studies, namely (a) the global burden of disease (GBD) study (WDR 1993 Appendix -B) and (b) the health sector priorities review (Jamison et al. 1993). The GBD study quantified global burden of premature mortality and disability due to about 100 diseases. Diseases cumulatively accounting for more than 90 percent 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 disease or disease clusters were taken up by multidisciplinary teams who studied the cost-effectiveness of available interventions.

Certain methodological characteristics appear common to all priority setting exercises in public health, namely: (a) some form of quantification of disease burden, (b) feasibility and cost-effectiveness of interventions, and (c) reliance on consensus among experts. 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 recognise top causes of illness and develop a motivation to reduce them. This motivation to attack top causes of disease burden inevitably leads to search for appropriate technologies and their cost-effectiveness. Considerations of technical, practical feasibility and cost-effectiveness of interventions play in the minds of policy makers (along with social political and ethical considerations) to determine which causes of disease burden are targeted by health care delivery system and which are the subject of further research. Thus the primary role of disease burden estimate is to set the agenda by creating concern and motivating policy makers. In addition disease burden estimates provide bench marks for future evaluation of the effect of health care interventions. Specific disease burden estimates are useful for cost-effectiveness analysis of interventions and health resource allocation modeling.

Summary and conclusion:

Valid and reliable statistics on cause of death is an essential input for setting of priorities in the health sector. Cause of death structure should directly lead to prioritisation of priorities for medical and health research, so that research efforts are directed towards top causes of death. Cause of death statistics is an important input for computation of summary measures of population health status, which help focus policy makers attention to important problems requiring solutions by health care delivery systems. Major initiatives to systematically identify health sector priorities have used cause of death information. However, professionals who are in a position to contribute to a reliable and valid cause of death reporting system, do not seem to realise its usefulness. We have taken up some studies at the Institute of Health Systems (IHS), Hyderabad to improve reliability and validity of cause of death statistics in Andhra Pradesh. These studies include review and reinvestigation of cause of death reports from the SCD Rural system, and the Medical Certification of Cause of Death scheme operational in urban areas. There appears to be total apathy towards cause of death reporting at all levels. Chiefs of clinical units do not appropriately emphasise the importance of writing up the cause of death report. Short term training programmes[4] to build cause of death report writing skills will help improve physician skills. In addition to poor physician skills in cause of death report writing, non maintenance of medical records or poor maintenance of medical records contributes inaccurate assignment of cause of death. I hope, that we can improve this situation by increasing awareness among the medical and public health professions about the need for reporting of cause of death. Given the inclination and a little bit of effort, we can help the country move forward and generate the required statistics for health policy based on more reliable evidence rather than conjectures.

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[4] The IHS has developed a training package consisting of one day workshop on cause of death writing. The workshops gives an overview of cause of death reporting and classification systems and then requires participants to write cause of death reports from sample medical records obtained from hospitals. Participants then work with a sample of poorly written cause of death reports to identify the deficiencies.

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