POINT OF VIEW

Equity in Health and Health Care in Nepal

- Experiences from Nepal Health Sector Reform

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A home on high. *Namche*, the remote village of 1,500 residents, North-Eastern Nepal *(Photograph by Robb Kendrick).*

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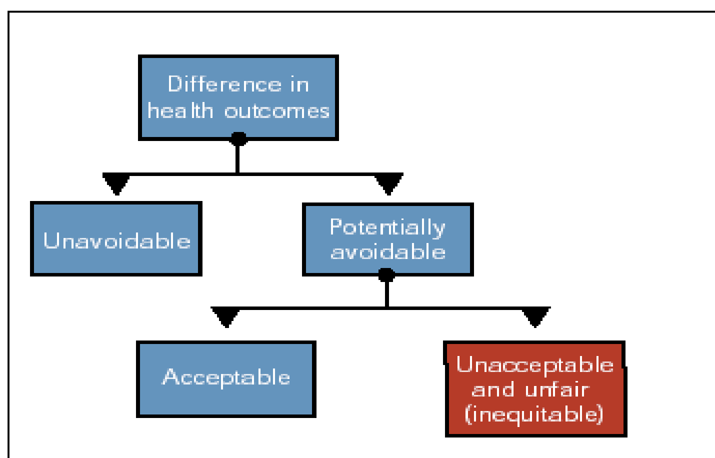
1. Equity in health and health care – ethical and social dimensions

Inequalities in health exist in every nation on earth. Some variations, including biologically determined differences between men and women, are inevitable. But many inequalities are considered *avoidable*.

Health inequalities exist largely because people have unequal access to society's resources, including education, health care, job security and clean air and water – all factors that society can influence.

Inequalities that are *unfair* (that arise from social injustices) and *avoidable* are considered inequities, see Figure 1 (WHO 1996, 1997a, Peter et al 2001). Health disparities *within* countries – industrial and developing – can be as great as disparities *between* richest and poorest countries in the world.

Figure 1. Judging the equity of health outcomes



Source: **Peter et al. 2001**

Neither overall increase in economic growth nor gains in aggregate health indicators are reliable proxies for improvements in equity related development goals (Diederichsen 2001). Nepal is no exception; during the last two and a half decades, the country has experienced an average economic growth rate of four per cent. However, despite the fact that poverty alleviation programmes has been included as objectives in general macro-economic planning since the Seventh Five-year Plan[1], *the incidence of poverty has not decreased* (UNDP 2002). The number of people below the poverty line has doubled from 4.7 million in 1976 to a current 9 million. New pro-poor and development action therefore necessitates assiduous reflection and evaluation of former policies in order to guide the elaboration of future policies (Panday 2000).

Precise definitions of equity are not available. Consensus on equity has eluded philosophers for at least 2,500 years (WHO 1997a). Analysis of equity in health inevitably depends on many contentious issues, resoluble in very different ways and all open to *discussion*.

Equity objectives tend to be of two types: *symbolic*, their purpose being to inspire and motivate; and *practical* or *action targets*, to help monitor progress towards equity and to improve accountability in the use of resources. (Whitehead 1998)

The term "equity", meaning fairness, has moral and ethical connotations. It refers to differences which are *unnecessary* and *avoidable*, but which in addition are considered *unfair* and *unjust*. *What* is avoidable will vary with potentially available resources; people may disagree about what resources are potentially available at a given time (Whitehead 1990). Notions of what is fair or just may vary among different societies. Every society must achieve a sufficient level of *consensus* on its own definition of equity in order to take effective action to reduce inequities (WHO 1996).

[1] Poverty alleviation were major objective of the Eighth Five-year Plan, and the sole objective of the Ninth and Tenth Five-year plans (UNDP 2002).

Dialogue and participation should be the leading principles through all levels of reform planning and implementation, from central level and Ministry of Health (MOH) through to the community and sub-health post.

Establishing a consensus on societal values for policy may seem a daunting task, but through international agreements most countries including Nepal has already committed itself to health and health care policies with common equity objectives. For Example, Nepal has adopted five Millennium Development Goals (MDGs) in the health reform plan. All health problems targeted for action are characterized by their being avoidable and mainly amenable to primary prevention intervention schemes addressing social root causes of ill-health**.**

2. The social environmental determinants of individual health

Remedies for health inequities must come not only from the health sector but also from broad social policies that address *potential health gaps* related to equity e.g. by distribution of income (Diderichsen et al 2001, DI 2000). The most prevalent gaps are:

- Gaps between socioeconomic groups
- Gaps between geographical groups
- Gender gaps
- Gaps between racial/ethnic groups
- Gaps between age groups.

Conditions that contribute positively to, or work negatively against, the individual's health status can be viewed as layers of the individual's health environment, from general environmental conditions to personal life style factors. Health policies aimed at reducing society's disease burden and promoting equity in health can therefore potentially take different entry points with various degrees of effect depending on the root causes at work.

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Nepal has adopted five Millennium Development Goals (MDGs) in the health reform plan. All adopted MDGs are characterized by their being avoidable and mainly amenable to primary prevention intervention schemes addressing social root causes of ill-health (Rutstein 1976, Bjerregaard 1990, MOH 2002).

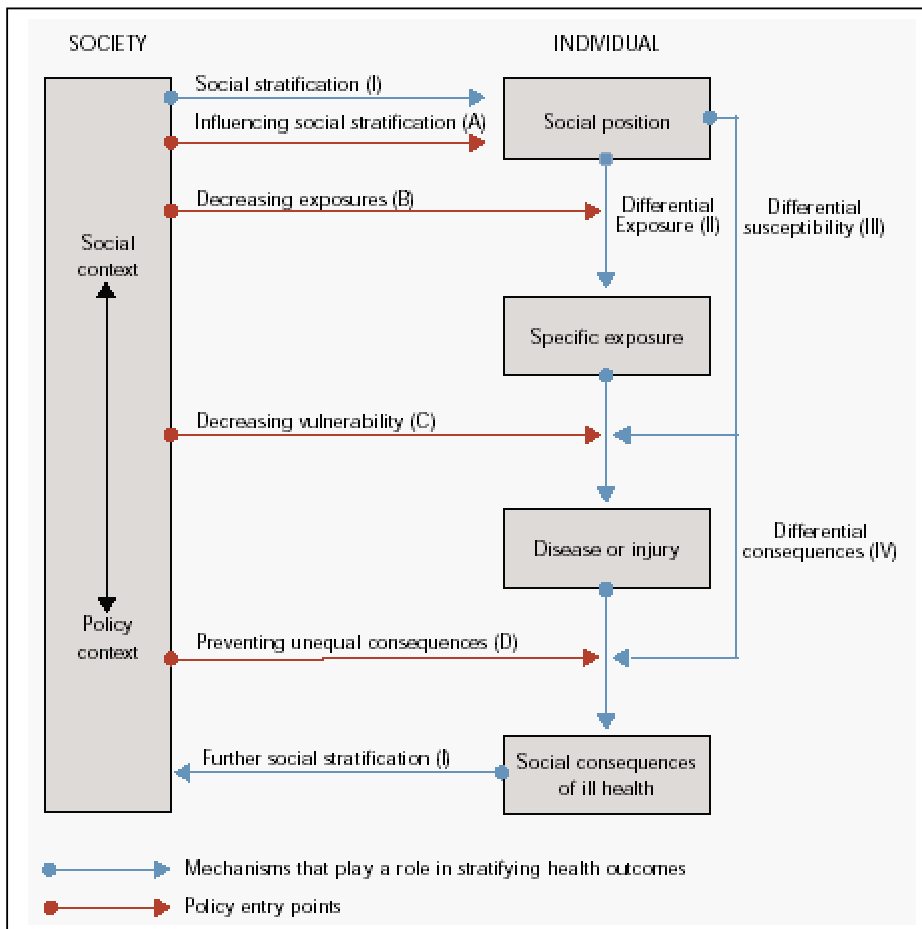
Application of a multi-sectoral framework for analysis of all relevant bottlenecks that must be overcome to meet the MDGs is therefore highly relevant when identifying appropriate and targeted policies. The multi-sectoral interventions should be undertaken alongside health system interventions. People do not live their lives according to sectors; health programmes must therefore be developed in a comprehensive way to achieve maximum effect (Gartoula 2003).

3. Policy responses to health disparities

Figure 2 reflects the *social determinants framework* that identifies the four broad conceptual mechanisms generating health inequalities.

- **Mechanism of social stratification**
- **Mechanism of differential exposure**
- **Mechanism of differential susceptibility**
- **Mechanism of differential social and economic consequences.**

Figure 2. A framework for elucidating the pathways from the social context to health outcomes and for introducing policy interventions



Source: **Diderichsen et al 2001**

Below, each of these mechanisms is elaborated briefly with empirical examples from Nepal.

3.1 Mechanism of social stratification

The forces of *social stratification I,* (see figure 3 above) are a mechanism leading to a separation of people into different social positions and, crucially, influencing the width of the gulf between these different sections of society. It is possible to influence the process of social stratification through economic, social and education policies that decrease (or increase) the divisions between different groups in society and also influence the ease with which social mobility can take place.

Although there have been cultural and religious cross influences between the two major racial groups found in Nepal, "Caucasoids" and "Mongoloids", both cultural and religious systems of the two racial groups retain varying degrees of distinctness (Gurung 2002). Mongoloid groups, such as Magar, Tamang, Kiranti, Gurung, are generally adherents of Buddhism and animism, while most of the Caucasoid groups are adherents of Hinduism. Hindus have a "vertical" (hierarchical) social structure based on the idea of ritual purity. At the apex of the system are the Brahmins or *Bahuns* and at the bottom are the Dalits whose ritual impurity renders them "untouchable" to the high caste. All Hindus are therefore members of some caste group (*Jat*), whether low or high. In contrast, Mongoloid groups tend to have more horizontal social structures and are recognised as Indigenous Nationalities (*Janajatis*) or Indigenous People (IP). In this Point of View the term "IP" will be applied for this group.

Caste related biases have confined the so-called "untouchable castes" to the lowest-paying menial jobs, restricted or blocked their access to common resources (including non-polluted water sources), and limited or denied their access to government and public services (UNDP 2002). Some ethnic minorities and indigenous groups also face similar discrimination.

Dominance in the power structure on the basis of caste hierarchy is another factor with an effect upon the mechanism of social stratification. All but 8.8% of the individuals occupying the top political, bureaucratic and executive positions in Nepal in 1999 were recruited from high caste Hindu groups (92.2%) (Gurung 2002). People with IP and Dalit identity held respectively 8.4% and 0.3% of total top positions with potential influence on policy enunciation, prioritisation of resource allocation and, not least, implementation of governmental programmes. Political marginalization of IPs and Dalits based on social discrimination is therefore considered the main reason that these groups are deprived of economic, educational and overall social well-being (Gurung 2002).

Table 1. Human development indicators, 1996, for selected social, religious and ethnic groups.

Social Group	Adult literacy rate	Per capita Income (NR)	Income Index	HDI	HDI Rank
Caste group					
Hill Bahun	58.0	9,921	0.237	0.441	II
Hill Chetri	42.0	7,744	0.181	0.348	III
Terai Castes	27.5	6,911	0.160	0.313	IV
Artisan Castes (Dalits)	23.8	4,940	0.110	0.239	VII
Language group					
Newar	54.8	11,953	0.289	0.457	I
Hill Ethnics (IP)					
Gurung, Limbu, Magar, Rai, Sherpa	35.2	6,603	0.152	0.299	V
Religious group					
Muslim	22.1	6,336	0.145	0.239	VII
Others	27.6	7,312	0.170	0.295	VI
Nepal (average)	36.7	7,673	0.179	0.325	-

***Source*: Gurung 2002.**

Women face discrimination in almost all aspects of life. The combination of poverty, the low status of women in the overall social structure, household drudgery, the culture of son preference, legal

age at marriage, women's low level of education and low nutritional priority, have been found to trigger the low health status of women in Nepal. Woman's low ranking and lack of decision-making power at the household level constitute significant barriers to health care access in rural women's utilisation of publicly provided health care services (DHS 2002, NCPWHD 2001, WB 2001A).

As can be seen from table 1 above, adult literacy and income are associated positively with one's position in the social hierarchy. The Human Development Index (HDI) - a composite index of *education*, *health* (life expectancy at birth (LEB)), and *income* - is an indicator of overall well-being of the population. The HDI ranking in Nepal shows a close association with the caste hierarchy (Gurung 2002). Brahmans, Newars, and Chhetris are well above the national average while IPs (excluding Newars), Dalits and Muslims are below. Terai castes have lower literacy and income levels than the national average; however, their HDI rank is higher than that of the IPs.

In table 2 disparities in three central indicators for health outcome is presented, stratified by caste/ethnic group. The indicators are Life Expectancy of Birth (*LEB),* Infant Mortality Rate (*IMR)* and the Under Five Year Mortality Rate (U5MR). Data reveals significant disparities in health outcome between the various caste/ethnic groups. For example, the difference in life expectancy between Brahmins and occupational caste is 10.6 years. Of especial note is the fact that neonates of Brahmins have a much higher probability of survival (IMF: 52.5) than infants born by occupational caste population segments (IMF: 116.5).

Table 2. Disparities in health outcome indicators by caste/ethnic group. 1996.

Caste/ ethnic group	Life expectancy at birth (years)	Infant Mortality Rate	Under Five Mortality Rate
Occupational caste	50.8	116.5	171.2
Muslim	52.2	108.6	158.3
Yadav/Ahir	54.2	98.5	142.0
Tamang	54.2	98.0	141.2
Magar	54.9	94.7	135.9
Limbu	55.2	93.2	133.5
Rai	55.3	92.9	133.0
Gurung	56.1	88.6	126.3
Chhetri	58.4	77.8	109.1
Tharu	58.7	76.0	106.4
Brahmin	61.4	52.5	69.0
Newar	63.2	56.0	74.9

Source: **UNDP 2002.**

The U5MR (which is one of five MDG targets adopted in the HSS) indicates the greatest proportional disparities among the various caste/ethnic groups. The probability of a five-year old child from an occupational caste dying is nearly three times as high as for a five-year old Brahmin child.

3.2 Mechanism of differential exposure

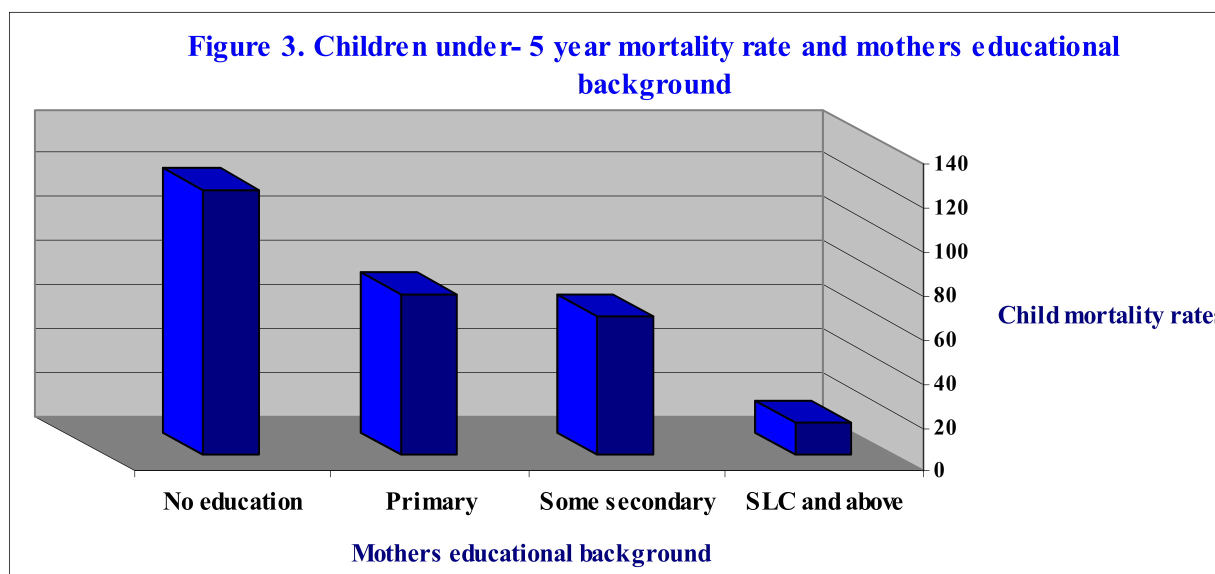
A crucial feature of the linkage between social inequities and health is the mechanism *differential exposure (II)* and health-damaging conditions (see figure 2 above). Each social position encounters specific patterns of health risk. An increase in exposure concomitant with decreasing social position

contributes to the observed gradient in health across the social spectrum. Compounding this situation is a tendency for health-damaging exposures to cluster, e.g. illiteracy, poverty and polluted water (as can be seen from tables 1-3 above).

In particular, policies aimed at providing greater social, educational and economic opportunities to poor women are likely to have positive health outcomes as experienced in Bangladesh and Kerala in India (Bhuiya et al 2001, Östlin et al 2001). As can be seen in figure 3 above, the under-five year mortality rates for children of uneducated mothers in Nepal is 121 per 1000 births, 64 per cent higher than for children of mothers who have some primary education and nearly double that of children of mothers who have some secondary level education (SLC) (DHS 2002). Compared with children of mothers with SLC and above, children of uneducated mothers have an *eight times higher risk* of dying. Reducing one key social risk exposure, such as illiteracy, might therefore significantly decrease the vulnerability of women to the effects of other health risks (WHO 1998, Östlin et al 2001). As shown in table 1 above, low literacy rates were recorded among Dalits, IPs and Muslims, making these groups particularly vulnerable to child mortality. It has further been found that Dalit women contrary to other population groups in Nepal have not experienced the same rate of progress - if they have experienced any progress at all - in indicators such as the use of family planning devices, girls attending schools and increases in life expectancy in recent years (Koirala 2002).

Comprehensive policies targeting illiteracy among women in deprived population groups will significantly mitigate differential health exposures faced by these groups. In order to meet health related MDGs, interventions through this policy entry point will contribute greatly to a reduction of the related disease burden. This can be achieved via health impacts stemming from increased empowerment of women's independency in decision taking and raised awareness of the potential health benefits from utilising health services which taken together will be acting conducive for raising demands for social services.

Figure 3. Children under- 5 year mortality rate and mothers educational background



Source: **NDHS 2002. (Note: SLC=School Leaving Certificate)**

Comprehensive empowerment policies aimed at diminishing overall gender disparities and influencing the position of women relative to men will therefore act positively on women's health

status. The potential effect of such policies will have marginally stronger health benefits for women from lower social positions due to a lower health status found, for example, among Dalits compared to non-Dalits (Koirala 2002, MWCSW 2002).

Alcohol consumption in some ethnic groups in the rural population is more acceptable and has lately become a symbol of higher status. Women and children whose family members drink excessively often suffer from domestic violence, stress and depression (NCPWHD 2001). IP also face a health risk due to low educational level. Thus alternative communication approaches should be considered when targeting these population segments. Since health needs are diverse and differ by locality due to gender, socio-cultural, ethnic and ecological diversity, it is important to develop variants of material and approaches in the Behaviour Change and Communication package (BCC) which are sensitive to specific populations (Cohen 1999, WB 2001A). Further, experience shows that locally produced health information materials have the greatest impact; opportunities at the local level should therefore be encouraged and finances made available to provide or create these local intervention approaches which could also include street theatre in order to reach the illiterate population segments (Ghimire 2003).

The BCC will increase consumer knowledge of common illnesses and cost-effective interventions, particularly in the four priority areas. Although the EHCS will not give priority to non-communicable diseases, it is essential that the BCC programme in the first five years includes programmes aimed at reducing tobacco and alcohol abuse. (MOH 2002B)

3.3. Mechanism of differential susceptibility

A third mechanism of *differential susceptibility (III),* [see figure 3 above] may sometimes come into play if two or more exposures act synergistically; that is, they interact to produce an effect on health that is *greater* than the sum of their separate effects. Typically the health care equity literature argues for care according to need (Diderichsen 2001). One critical issue therefore is the definition of need. If need is defined with no sensitivity to the special needs of disadvantaged populations, it is likely that the implied lack of efficiency in the services provided will accentuate inequalities. Without special consideration, they may even be prone to prolonged disability and more complications (Diderichsen 2001, WB 2001E).

Table 4. Adequacy of health care services, urban and rural areas (percentage distribution)

Adequacy level Urban/Rural	Less than adequate	Just adequate	More than adequate	Not applicable	Total
Urban	**24.08**	**74.91**	**0.39**	**0.62**	**100.00**
Kathmandu	4.44	95.56	0.00	0.00	100.00
Other urban	37.30	61.01	0.66	1.03	100.00
Rural	**61.42**	**37.87**	**0.09**	**0.62**	**100.00**
Western hill/mountain	67.28	32.57	0.14	0.00	100.00
Eastern hill/mountain	60.62	38.88	0.21	0.30	100.00
Western Terai	62.36	37.34	0.00	0.30	100.00
Eastern Terai	56.26	42.14	0.00	1.60	100.00

Source: **NLSS 1997.**

As can be seen from table 4 above a clear difference exists between urban and rural Nepal according to households reporting on adequacy in consumption of health care services.

In Kathmandu only four percent of the households indicate less than adequate health care, comparatively low in contrast to Western hill/mountain where households report nearly 70% inadequate health consumption relative to needs. The significant rural-urban disparity in unmet health care needs is indicative of social exclusion related to developmental, structural and geographical background variables. Compared with similar reporting on items like food consumption, housing, clothing, schooling and total income, the same country profile of unmet needs appears. According to the last item, total income, 77 percent of the households in Western hill/mountain report less than adequate total income, compared to 35 percent in Kathmandu.

Although access to health institutions has improved, the quality of services leaves much to be desired. A 1998 survey found that household members seeking health care in government health institutions identified the following main problems in government health institutions (in descending order): lack of medicine; poor condition of facilities; bad attitude of staff; and lack of staff (see table 5).

Table 5. Opinion on problems of government health institutions as seen by households and health workers.

Problems	Households %	Health workers %
Lack of medicine	59	84
Poor condition of facilities	40	61
Bad attitude of staff	35	-
Lack of staff	11	64
Lack of community support	-	13

***Source:* UNDP 2002**

Policies aimed at promoting equity issues and gender mainstreaming can potentially collide with the prevailing diversity of local needs. Thus *participatory planning* becomes essential in formulation policies if they are to adequately address local needs (UNDP 2002). For example, generic plans are often found to be of limited use in comparison with place- and context-specific birth activism. To focus, for example, on the role played by the over 13,000 trained traditional birth attendants (TBA) is to overlook the fact that the main sources of maternal and child health problems are not located in the mismanagement of obstetrical crisis but in the lack of economic and social leverage that childbearing women have over their lives (Pigg 1997).

What would a "training" organised around the understandings of birth in a Nepali community look like? It would have to be a dialogue, a discussion, rather than a "training". It would not begin with a biomedical model of managed obstetrical care that is then adapted to local idiosyncrasies. It would have to begin with the knowledge, values, and concerns of the women involved instead of with the assumptions that their understandings are inadequate and deficient. It would have to take into account the politics of gender and generation in families in Nepal, and the politics of class, caste and ethnic relations in specific communities. It would not necessarily begin by targeting birth attendants. (Pigg 1997)

Empowerment and health training programmes therefore come to the fore as strategic policy entry points. In designing these programmes multicultural, multilingual and multiethnic representation and participation are considered essential in order to sensitize the current health care system to a multiethnic context (Limbu 2003).

It is widely acknowledged by evidence based facts that infrastructure interventions (water, sanitation, energy, transport and housing) are key inputs into the "production functions" for MDGs related to poverty, education, health and gender. Holistic and comprehensive approaches are

therefore considered essential for effective decentralization of health care services in the context of Nepal (Chand et. al 2002; Gartoula 2003).

3.4 Mechanism of differential social and economic consequences

Although social disadvantage is likely to lead to ill health, it is also important to point out that ill health through its differential social and economic consequences (IV) [see figure 3] may even *accentuate* social stratification. In countries like Nepal without social safety nets, adult illness and death are often associated with the loss of household income-generating capacity.

These costs of ill health frequently precipitate a downward spiral into poverty and further risks of illness for an entire household.

In the Nepal Living Standards Survey Report from 1996, adequacy of foods and services, including health care, are reported. Respondents were asked to give their opinion about their consumption levels for various items by indicating whether it was less than adequate, just adequate or more than adequate. The term “adequate” in the survey meant neither more nor less than what the respondent considers consumption needs of the family (NLSS 1997).

According to NLSS household expenditures, gaining access to publicly provided health services varies substantially by income group, ranging from NR 470 a year for the poorest quarter to NR 5016 for the wealthiest quarter of the population. Likewise, regression results have shown, along with distance to a health facility, that household economic status is a significant determinant of whether or not an individual seeks treatment.

These indications strongly suggest that the poor do not have the resources required to purchase needed health care and even face difficulties in ability to pay the travel expenses necessary to access care.

A study of China´s poor rural areas - covering 150 million people - indicated that high medical expenses had become *the primary cause* of poverty. 18 per cent of the households that used any health services in 1993 had incurred health expenditures that *exceeded* their total household income. 47 per cent of the medically indebted households reported having suffered from hunger. The interaction between health and income could potentially start a *vicious circle of illness, poverty, and further illness.* (Liu et al 1995)

Generally, the majority of households in the rural areas are in a vulnerable position, potential captives of the vicious development circle of illness, poverty, and further illness. Because of very low ability to pay relative to health care needs, the negative impact of the downward spiral constitutes potentially one of the main explanatory factors behind the wide geographical disparities found in health outcome in Nepal today.

In systems without insurance or equitable access to it, unreasonably high health-care costs associated with treatment for illness are a primary cause of household asset depletion. Importantly, each of these stratifying mechanisms may be countered by specific policies, outlined as policy entry points A to D in figure 3 above. *Risk pooling arrangements* constitute a viable policy approach. Risk pooling under social or private group insurances merges the health risk for a group of people who have different levels of health care need and different incomes. The benefits are therefore provided on the basis of need within that group. The less healthy people and the low-income households have the potential of benefiting *more* from risk pooling, and the expenditure side of this type of insurance is therefore progressive (Hsiao et al 2001).

4. Conclusions

- In formulating health interventions aimed at achieving aggregate health goals in Nepal, such as the MDG targets on U5MR and IMR, it will be key for planners to take into account the overall social structure and related mechanisms affecting health.

- It is important to *discuss* the range of different concepts pertaining to equity held by different population sub-groups (social, ethnical and religious), and to clarify points of *consensus* and *disagreement* where possible. This understanding of points of disagreement as well as consensus is needed to permit the meaningful communication required for effective social action.

- Multicultural, multilingual and multiethnic representation and participation are essential components in design of the future health system in Nepal. Forums for dialogues should be established as part of reform planning aimed at identifying ways to reduce health inequalities and inequities in access to health care services.

- People do not live their lives according to sectors; health programmes must therefore be developed in a comprehensive way to achieve maximum effect. Application of a multi-sectoral framework for analysis of all relevant bottlenecks that have to be overcome to meet the MDGs are therefore highly relevant when identifying appropriate and targeted policies. Supportive multi-sectoral activities should be undertaken alongside health system interventions.

- Since health needs are diverse and differ by locality due to gender, socio-cultural, ethnic and ecological diversity, it is important to develop variants of information material and approaches in the Behaviour Change and Communication package (BCC) which are sensitive to specific populations. Further, experience shows that locally produced health information materials have the greatest impact. Opportunities at the local level should therefore be encouraged and finances made available to provide or create these local intervention approaches.

- Current availability of essential drugs is a key factor in creating a demand-driven development of local health services and thereby raising utilisation of health facilities, especially in rural areas. Health care strategies to reach poor rural women are therefore not only required to provide services to convince women to *demand* the services. To generate the demand for health services necessarily implies the introduction of a multifaceted strategic approach, focusing on: the availability at all times of essential drugs to fit the needs of the catchments areas; training of health personnel to staff posts compliant with the health needs and demands of the women; the provision of infrastructure to physically ensure ability to reach the health facility and to reduce other costs such as transport; the creation of an enabling environment for women according to traditions, culture and local circumstances, for example, by training staff and developing manuals/guidelines for NGO/MOH employees working in IP locations.

***Important links and key references*:**

References (selected)
(Write to the author lcn@easeint.com to receive a full reference list for this Point of View)

Diderichsen, F., Evans, T. Whitehead, M. *The Social Basis of Disparities in Health.* From