WP3: Equity in Health Care Systems

**Introduction**

Inequity in health care system exists when health disparities between particular social groups are considered systematic and unfair. This is when worse-off individuals systematically use fewer medical services or — in systems involving limitations in public health services usage — use more out-of-pocket paid services than the better-off. Another example is when out-of-pocket co-payment for medical care or drugs is so high that it exceeds households’ capacity-to-pay (e.g. disposable income after covering the basic living expenses).

**Background**

A well defined methodology of analyzing health equity using household survey data was developed at the end of 20th century [1] and employed in many OECD countries in Europe, Americas and Asia [2,3,4,6]. The main measure of equity is the “horizontal equity index” (HI) whose value is indicative of whether those of equal medical needs get equal treatment: if HI=0, equity is achieved. If HI<0, there are “pro-poor” inequities, i.e. poor people use proportionally more health care services. HI>0 means “pro-rich” inequities when rich people have a better chance to fulfil their health needs.

Another measure of health care system fairness is the index of catastrophic out-of-pocket spending. People may suffer impoverishment as a result of facing high health care costs. Financial catastrophe depends not only on the amount of spending as even little expenses may be catastrophic for poor people with minimal income. Thus “catastrophic” means exceeding predefined share of income (usually 10%) or of “capacity to pay” (e.g. income diminished by spending on food; in this case the share of 40% is most commonly used) [7,8,9]. The percentage of people facing catastrophic out-of-pocket spending (catOOP) can be regarded as an indicator of how good the health care financing system protects people from spending more for their health needs than they can afford.

**Methods and Findings**

Under the InterQuality Project, we have performed Equity Study assessing catOOP and HI indexes using national statistical data from Denmark, Germany and Poland (Statistics Denmark[10], SOEP[11], GUS[12]). We compared the results with our pilot study on SHARE wave 2 (for population over 50 y.o.)[13] as well as previously performed published studies, and in case of Poland — with the analysis of similar kind performed on data from households survey Social Diagnosis[14,15].

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<th>Table 1 Equity indexes used in InterQuality Equity Study</th>
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<td><strong>Index</strong></td>
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<td>Catastrophic out-of-pocket health care spending index</td>
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<td>Horizontal inequity index</td>
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Available data enabled to assess HI of access to GPs and hospital care in 2006 and 2010. In both 2006 and 2010 in Germany, the utilization of GP care was equitable in poor and rich, but the probability of seeking GP care was pro rich. In Poland, pro rich distribution was maintained in 2006, while in 2010, it turned to more equitable. In Denmark, the probabilities of seeking GP care in 2006 and 2010 were equally distributed, while the numbers of visits remains significantly pro poor. In both 2006 and 2010, HI revealed pro poor use of hospital services in Germany and in Denmark while equitable distribution of hospital stays in both 2006 and 2010 was demonstrated in Poland.

This results revealed some diversity when compared with the ones from SHARE database and publications found. As previously suggested[5], the international comparisons need highly unified data gathered with the use of a similar methodology - which was not the case in our study.

Our results on catOOP in Germany (2009), Denmark (2010) and Poland (2010) were much more consistent, showing much higher share of households with catastrophic out-of-pocket health spending in Poland than in Germany and Denmark in 2009/2010. Catastrophic out-of-pocket spending was highly concentrated among poor population groups in Poland, much less pro poor in Germany, and was concentrated more among rich people in Denmark. Time trends analysis revealed that in 2000, catOOP10 index for Poland (0.8%) was lower than the one for Denmark (3.5%). In consecutive years, the index for Denmark changed slightly while in Poland, it grew to 10.8% in 2004, 24.3% in 2006 and decreased slightly in 2010 (Fig. 1).

**Recommendations**

- Equity and fairness should be carefully considered as a health policy strategic objective in the process of making decisions regarding financing healthcare from public funds.

- More in depth studies to understand origins of disparities in access towards healthcare as well as its impact on life expectancy of society should be initiated. Health policy makers should be perhaps guided by these findings in their efforts to reform the healthcare system according to the equity and fairness paradigm.

- Horizontal inequity index can be a valuable tool in monitoring changes in time of the distribution of access to health care services between poor and rich within a single system; international comparisons of HIs is sensitive to data type and the data collecting methodology.

- Catastrophic out-of-pocket health spending indexes are a consistent measure that may be used for international comparison of fairness of health expenses in health care systems. Systems with relatively low and stable catOOP indexes may constitute a benchmark for the emerging, less stable ones that have problems with preserving people from spending more for their health needs than they can afford.
References


