

analyzed a sample for which agarose electrophoresis with the Hydrasys analyzer (Sebia), using Hydragel 15 HR gels (Sebia), missed a large IgM κ (12 g/L) monoclonal protein. The protein was detected by capillary electrophoresis and by the Beckman Paragon agarose electrophoresis system. The failure of the Hydrasys system to detect this monoclonal protein was related to the way sample application is performed with this semiautomated system.

References

1. Mariën G, Vranken G, Demuylder M, Blanckaert N, Bossuyt X. Clinical capillary zone electrophoresis of serum proteins: balancing high sensitivity and high specificity. *Clin Chem* 2003;49:1419–20.
2. Day K, Zakowski J. Reply to: Clinical capillary zone electrophoresis of serum proteins: balancing high sensitivity and high specificity. *Clin Chem* 2003;49:1420–1.
3. Keren DF, Gulbranson R, Carey JL, Krauss JC. 2-Mercaptoethanol treatment improves measurement of an IgM κ M-protein by capillary electrophoresis. *Clin Chem* 2001;47:1326–7.

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Priority In *Clinical Chemistry*: Does It Match International Public Health Need?

To the Editor:

The World Health Organization reported mortality (number of deaths) and morbidity (number of disability-adjusted life-years) data for 1999 for each of 97 different causes of morbidity and mortality in a world composite population and 14 regional populations covering most of the world (1). The 14 regional populations are defined by geographic location and mortality rate as listed in Table 1.

I scanned each editorial, article, case report, technical brief, letter to the editor, and independent abstract published in four sources in *Clinical Chemistry*: volume 47, number S6;

Table 1. Correlation between the number of publications in *Clinical Chemistry* on, and the number of deaths (mortality) or disability-adjusted life-years (morbidity) from, 97 different causes in different populations.

Population ^a		Correlation coefficient	
Location	Mortality rate	Mortality	Morbidity
Americas	Very low	0.683	0.487
Europe	Very low	0.640	0.486
East Mediterranean	Low	0.627	0.414
Europe	Low child; high adult	0.609	0.514
Europe	Low	0.605	0.433
Americas	Low	0.570	0.342
South-East Asia	High	0.510	0.211
World composite		0.479	0.196
Americas	High	0.442	0.240
West Pacific	Very low	0.399	0.254
East Mediterranean	High	0.377	0.169
South-East Asia	Low	0.345	0.127
West Pacific	Low	0.204	0.104
Africa	High	0.075	0.011
Africa	High child; very high adult	0.037	0.014

^a Populations are defined by location and mortality rate as described in the World Health Organization report for 2000 (1).

volume 47, numbers 1–12 excluding S6; volume 48, number S6; and volume 48, numbers 1–12 excluding S6. The S6, National Meeting, issue was treated separately because the criteria for publishing in S6 differ from those for publishing in the other issues. I assigned each publication to one of two categories according to whether it did or did not address 1 or more of the 97 causes of morbidity and mortality.

The numbers and percentages of all publications that addressed 1 or more of these 97 causes are as follows: volume 47, number S6 = 528 or 58%; volume 47, numbers 1–12 excluding S6 = 401 or 75%; volume 48, number S6 = 432 or 62%; volume 48, numbers 1–12 excluding S6 = 358 or 77%.

For each population, I calculated correlation coefficients between the number of deaths from each cause and the number of publications on that cause in each of the four sources in *Clinical Chemistry*. The mean correlations for all four sources are described in Table 1.

For each population, I also calculated correlation coefficients between the number of disability-adjusted life-years from each cause and the number of publications on that cause

in each of the four sources in *Clinical Chemistry*. The mean correlations for all four sources are described in Table 1.

The validity of these rank orders is confirmed by the consistency among the four selected sources in the Journal. The same five populations exhibited the five highest correlation coefficients for both mortality and morbidity in all four sources. Similarly, the Western Pacific low-mortality population exhibited the third lowest correlation coefficient, and the two African populations the two lowest correlation coefficients, for both mortality and morbidity in all four sources.

I conclude that the enormous health needs of Africa and the less-developed countries of the Western Pacific are not being addressed by the AACC and offer this conclusion as an example of the Inverse Care Law, i.e., the availability of medical care varies inversely with its need (2). One strategy for overthrowing this law involves objective assessment of national and regional health (3). Such assessment would facilitate objective priority setting and recognition, and eventual control, of a currently unnoticed medical error (4), i.e., misplaced priority.

References

1. World Health Organization. The world health report 2000: health systems, improving performance. Geneva, Switzerland: World Health Organization, 2000:215pp.
2. Hart JT. The inverse care law. *Lancet* 1971;1: 405-12.
3. Dix D, Matacin M, Cohen P. On measuring the health of nations. In: Oden RK, ed. 27th Annual Third World Conference proceedings. Chicago: Third World Conference Foundation, 2001:215-23.
4. Bonini P, Plebani M, Ceriotti F, Rubboli F. Errors in laboratory medicine. *Clin Chem* 2002;48: 691-8.

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Comment on Dix

To the Editor:

The letter by Dr. Dix raises questions about the lack of coverage by *Clinical Chemistry* of diseases that have higher prevalences in less-developed countries. The data he uses are based on the WHO 2000 report, and he correlates the number of articles related to 97 causes of morbidity and mortality separately for low- and high-mortality areas of the world as classified by WHO.

It is of interest that WHO in its *World Health Report 2002 (1)* also looked at health in relation to 20

leading selected risk factors (Fig. 1). Several of the risk factors have a disproportionate effect on health in developing countries; these risk factors include underweight (malnutrition), unsafe sex, unsafe water, and iron and vitamin A deficiency. Other risk factors, such as blood pressure, tobacco, alcohol, cholesterol, and overweight, all tend to lead to chronic diseases, which have a large array of laboratory testing; these risk factors have similar effects on health in developed and developing countries.

Nevertheless, I have little doubt that this journal has many more

Figure 4.9 Global distribution of burden of disease attributable to 20 leading selected risk factors

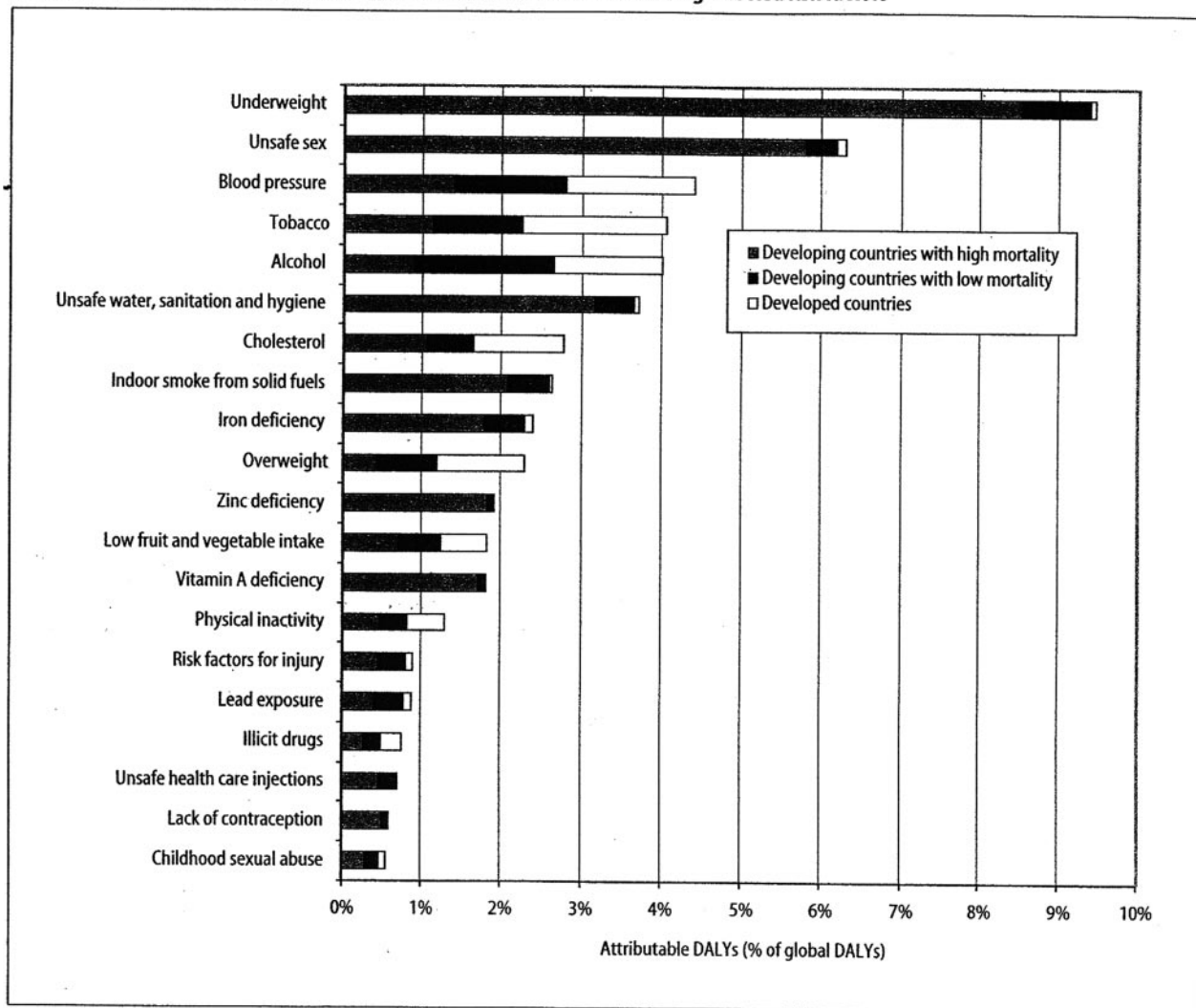


Fig. 1. Global distribution of burden of disease attributable to 20 leading selected risk factors [Fig. 4.9 from *The World Health Report 2002 (1)*]. Reprinted with permission from WHO.