have a low status within the medical field (75.5% versus 40.6%, difference 34.9%, 95% CI: 18.1%, 51.5%), and refrained more frequently from becoming an epidemiologists, even if a modified integrated curriculum was introduced (29.6% versus 18.5%, difference 11.1%, 95% CI: 4.2%, 26.6%).

The low opinion of epidemiology, particularly among internists, is not entirely unexpected. Even David Sackett, one of the founders of evidence-based medicine, realized the importance of epidemiology and its relevance to clinical medicine rather late. Clinicians often refrain from formally applying the tools of epidemiology during clinical decision-making, tend to be categorical in expressing clinical outcomes, are uneasy about uncertainty, and are reluctant to express this uncertainty using probabilities.

Ever since its foundation in 1954, the International Epidemiological Association has been concerned with education about and promotion of the wider application and use of epidemiology. However, no special emphasis for clinicians had been made. Subsequently, under the auspices of the International Clinical Epidemiology Network (INCLEN), faculties from six identified institutions in India were trained abroad, so that they in turn could develop local and regional capacity and expertise. However, it appears that further dissemination of this knowledge has not taken place. Apparently the ‘trained’ could not become ‘trainers’ as envisaged.

This survey indicates a need to have new look at the issue of epidemiological training for prospective clinicians in India. Reorganizing the undergraduate and postgraduate medical curricula may be necessary, particularly in the field of internal medicine. Integrating epidemiology with clinical teaching, using relevant examples to make it more interesting and easy to comprehend and supplementing the formal classroom teaching of epidemiological methods with teaching sessions during ward rounds might be helpful.

References


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Access to data from European registries for epidemiological research: results from a survey by the International Epidemiological Association European Federation

From HENRICA CW DE VET, JACQUELINE M DEKKER, EVERT BEN VAN VEEEN and JØRN OLSEN

Sirs—European directives and laws determine more and more the conditions for epidemiological research within Europe. The International Epidemiological Association (IEA) aimed to investigate whether these directives facilitate or hinder epidemiological research in Europe. It goes without saying that European epidemiologists, with a large variety of different exposures related to living conditions, occupations, diet, lifestyles, and health care between EU countries, are in a good position to produce more and better research if they get access to data from morbidity and mortality registers.

In 1995 the European Union issued the EU Data Protection Directive ‘on the protection of individuals with regard to the processing of personal data and on the free movement of such data’. (http://www.privacy.org/pi/intl_orgs/ec/final_EU_Data_Protection.html). The aim of this Directive is to set minimum standards for data protection in the various EU countries in order to facilitate the free flow of data between these countries (internal market motive) while at the same time offering a high level of privacy protection. It contains certain exemptions to the general principles in order to facilitate research with sensitive data (recital 28 and article 13). Therefore the Directive should also facilitate the sharing of data from morbidity and mortality registries among epidemiologists in the EU. The directive states that EU member states may set their own rules and regulations with regard to availability of data from registries, but these rules should not discriminate between member states.

A questionnaire was composed and sent to all national epidemiological societies in 2000/2001, and it was also available on the IEA website (www.iea.org). Responses were received from Denmark (17), UK (4), The Netherlands (2), and one response from Finland, Sweden, Switzerland, France, Spain, Greece, Austria, Poland, and Yugoslavia-Serbia. The answers of multiple responders within countries varied to some extent. Where available, the answers of the National Committees were used.

The EU Data Protection Directive was at the time of the survey implemented in Denmark, the UK, The Netherlands, Finland, Sweden, Austria, and Poland. The responders from other countries were not sure. Being non-EU (candidate) member states, the
Directive was not implemented in Switzerland and Yugoslavia-Serbia.

Most Danish responders stated that the EU directive had made epidemiological research less difficult. In the UK, Finland, Austria, and Poland, the responders felt that research had become more difficult. In The Netherlands and Sweden the situation was considered unchanged.

In all countries data from mortality registries can be used without individual consent in an entirely register-based research project. Cause of death is difficult to obtain in The Netherlands, in Poland, and in France.

All countries have a cancer registry and usually a number of other morbidity registries. Scandinavian countries have a large number of registries for several diseases. In most countries, except Austria and Yugoslavia, data from these registries are identifiable at an individual level. Data from these morbidity registries can be used for epidemiological research based entirely on registries without individual consent, except in Poland where individual consent is necessary. In Austria and Yugoslavia these data cannot be used at all for research.

Whether individual consent is needed for linkage of morbidity registries to research data appears to depend on the type of project in Denmark and the UK. In The Netherlands and Poland individual consent is always needed, while in Sweden, Switzerland, Spain, and Greece no consent is required.

We also asked if stored data with personal identifiers can be used for another research purpose that requires no personal contact to study members without renewed informed consent. In Switzerland, Austria, and Poland these data cannot be used for other research purposes. In The Netherlands and Yugoslavia renewed informed consent is necessary. In other countries this depends on the research question.

Obviously, there is variation between regulations in different countries. However, the primary aim of this EU Directive was not to make uniform regulations, but to make data also available to other member states, without additional conditions. From our survey it appeared that about half of the responders had applied for use of data from other EU member states and they had all received permission.

More detailed information on the study can be obtained from www.iea-seminar.au.dk. The questionnaire can be found at www.ieaweb.org (Click European Federation and then ‘Personal data’). The European Commission conducted its own evaluation of the Directive. The conclusion was that by now all member states had implemented the EU directive, though some were very late with it. As the background of the Directive is driven mainly by economic issues, nothing is reported about research data and health aspects. The accompanying ‘Analysis and impact study’ reveals more clearly the different approaches which have been taken by various countries when implementing the Directive, e.g. in the definition of ‘personal data’. Some countries consider coded data where the receiver of the data does not have access to the code as personal data, while other countries consider these as anonymous data (on the level of the receiver). Obviously epidemiological research is better served with the latter interpretation. The commission does not make a choice between these two interpretations and considers this subject open to further debate. Therefore it is important that the IEA keeps surveying the consequences for epidemiological research within Europe and will put possible negative aspects on the European agenda.

References
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Is there a Mediterranean migrants mortality paradox in Europe?

From M KHLAT1 and N DARMON2

Sirs—Compared with non-Hispanic Whites, Hispanics in the US are poorer and less educated, and yet they enjoy a lower all-cause mortality rate. This so-called ‘Hispanic Paradox’ has received much attention over the past 20 years, both in the epidemiological and demographic literature. Besides artefactual explanations (i.e. possible under-reporting of Hispanic deaths on death certificates), competing theories fall into two categories: the ‘salmon bias hypothesis’, according to which migrants are likely to return to their country of origin after they retire or become seriously ill, and, the ‘healthy migrant hypothesis’, according to which those who migrate and remain in the host country are the healthiest and strongest members of their population of origin.

To date, two reviews have documented extensively the wealth of literature on the Hispanic paradox. One, which is very critical of the concept, focuses on low birthweight and infant mortality; the other, which is relatively supportive, covers all the different health components involved in the paradox (mortality, infant mortality, violence, AIDS, coronary heart disease, stroke, cancer, and diabetes).2 The first concludes that the evidence supporting the paradox is fragile and highlights the potential role of selective processes in explaining the migrants’ advantage, while the second puts forward the complexity of the picture, with variations by age, gender, type of Hispanic group, degree of acculturation, and specific disease or cause of death.

Recently, a paper—to be considered as a landmark in the field—has very elegantly established that neither the salmon bias, nor the selection of healthy Hispanic migrants into the US

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