

categorises new medicines in relation to clinical need.<sup>8</sup> A small working group consisting of paediatricians, the Association of the British Pharmaceutical Industry, and the Faculty of Pharmaceutical Medicine was established following the conference to try and take the matter forward.

As a paediatric clinical pharmacologist I have a clear conflict of interest in that I wish to ensure that appropriate clinical trials are carried out. However, as a parent and a paediatrician I have a bigger conflict of interest in that I wish to ensure that children receive medicines that have been proved to be effective, safe, and of high quality. Medicines are clearly essential for the care of children. These medicines need to be tested scientifically as part of a controlled clinical trial. The alternative is to continue to force paediatricians to use these medicines without an evidence base. Such a situation has already resulted in the death of at least 15 children from the use of propofol as a sedative in critically ill children.<sup>11</sup> If propofol had been studied as part of a clinical trial, one death would have led to an urgent reappraisal of the trial and treatment. We cannot allow the lives of other children to be put at

risk by not establishing an evidence base for the use of medicines in children.

Imti Choonara *professor in child health*

University of Nottingham, Derbyshire Children's Hospital, Derby DE22 3NE

- 1 Bonati M, Choonara I, Hoppu K, Pons G, Seyberth H. Closing the gap in drug therapy. *Lancet* 1999;353:1625.
- 2 Choonara I, Nunn AJ. Should the treatment of children be evidence-based? *Paed Perinatal Drug Therapy* 1999;3:2-3.
- 3 House of Commons Health Committee. *The specific health needs of children and young people*. London: House of Commons, 1997:vii-ix.
- 4 Conroy S, Choonara I, Impicciatore P, Mohn A, Arnell H, Rane A, et al. Survey of unlicensed and off-label drug use in paediatric wards in European countries. *BMJ* 2000;320:79-82.
- 5 Conroy S, McIntyre J, Choonara I. Unlicensed and off label drug use in neonates. *Arch Dis Child Fetal Neonatal Ed* 1999;80:F142-5.
- 6 Turner S, Nunn AJ, Fielding K, Choonara I. Adverse drug reactions to unlicensed and off-label drugs on paediatric wards: a prospective study. *Acta Paediatr* 1999;88:965-8.
- 7 Gennery B. Clinical research in children: a pharmaceutical industry view. *Paed Perinatal Drug Therapy* (in press)
- 8 Spielberg SP. Paediatric therapeutics in the USA and internationally: an unparalleled opportunity. *Paed Perinatal Drug Therapy* (in press).
- 9 Conroy S, McIntyre J, Choonara I, Stephenson T. Drug trials in children: problems and the way forward. *Br J Clin Pharmacol* 2000;49:93-7.
- 10 Kearns GL. The paediatric pharmacology research unit network: proof of concept. *Paed Perinatal Drug Therapy* 1999;3:9-14.
- 11 Bray RJ. Propofol infusion syndrome in children. *Paediatric Anaesthesia* 1998;8:491-9.

## Ten years of German unification

*We need to know more about the impacts on health*

Ten years ago last month the postwar division of Germany came to an end. Less than a year after the fall of the Berlin Wall, the two halves of Germany became a single state. In a decade during which Europe was characterised by immense social and political transition, the experience of the people of the former German Democratic Republic was unique. Institutions and policies developed over 45 years of communist rule were swept away almost at once. Although neighbouring countries, such as Poland and the Czech Republic, underwent rapid change, none could compete with the scale of the East German transition. It would be surprising if social and economic transition on this scale had not had an impact on the health of those living in the former East Germany. Ten years on, it is beginning to be possible to assess what this impact has been.

The scenes in Berlin on the night the wall fell testify to the initial euphoria that accompanied unification. Access to the immense resources of the Federal German Republic seemed to offer the "best of all possible post-communist worlds."<sup>1</sup> Within a few months a more realistic assessment emerged. Monetary union in July 1990 protected the savings of the former East Germans but also triggered collapse of the economy in the east. Low quality East German goods could not compete internationally when priced at western levels. Within a year industrial output had fallen by half. Over a third of the preunification workforce of 9.8 million were out of work by the end of 1992.

The pace of change required "pragmatic solutions."<sup>2</sup> A transfer of the West German model of health care was almost inevitable, leaving little space for solu-

tions that took account of local context. The basic elements of the Federal German model were adopted by early 1991. The old system of polyclinics and related facilities gained a five year reprieve, but otherwise the new system in the east was almost exactly the same as in the west. The eastern part of Germany still lags behind the west economically, but, in many respects, the two are now indistinguishable.

The immediate post-unification period was characterised by an increase in deaths in the east, with life expectancy falling by almost a year among men, although by only 0.1 year among women.<sup>3</sup> This was owing primarily to a rise in deaths from injuries and violence, reflecting the sudden availability of western cars<sup>4</sup> but also to an increase in homicides.<sup>5</sup> This worsening mortality pattern has resolved, although deaths from injuries have only now returned to their pre-transition levels. The rapid transition did, however, usher in a period of sustained improvement in health that exceeded even the most optimistic predictions. Between 1992 and 1997, life expectancy at birth increased by 2.3 years in males and by 2.4 years in females, substantially more than in Poland, Hungary, or the Czech Republic.<sup>3</sup> The improvement was mainly due to fewer deaths from injuries and violence among young men and from cardiovascular diseases among men and women aged 55 years and over. These changes were accompanied by a decline of a third in neonatal mortality, largely due to improved survival at low birth weights.<sup>6</sup>

What specific factors account for these changes? The reduction in deaths from cardiovascular disease is not unique and is also apparent in countries such as

*BMJ* 2000;321:1094-5

Poland and the Czech Republic.<sup>7,8</sup> The most likely explanation is a rapid change in diet, reflecting greater availability of fruit and vegetable oils. Similar dietary changes have taken place in east Germany.<sup>9</sup> The prevalence of hypertension has also fallen among eastern men, although it has increased slightly among women.<sup>10</sup>

A second factor seems to be an improvement in the quality of medical care. For example, a substantial decline in deaths from testicular cancer has been attributed to wider access to modern drugs.<sup>11</sup> Improvement in the quality of care provided to low birth weight babies seems the likely explanation for much of the improvement in neonatal mortality, a phenomenon also seen in the Czech Republic.<sup>12</sup> Finally, a general improvement in living standards among elderly people seems to have contributed to the fall in deaths at older ages.

The old system may, however, have had some advantages that now risk being lost. Smoking rates among eastern women increased from 20.5% in 1990-2 to 29.1% in 1998.<sup>13</sup> Previously high immunisation rates against pertussis have fallen after unification, resulting in an increase in incidence rates of about 10-20 times in school aged children since 1989.

In all these areas there are, however, many unanswered questions. Ten years on much has been written about the political, social, economic, and industrial consequences of German unification. Perhaps it is now time to learn more about its consequences for health.

Ellen Nolte *research fellow*

(ellen.nolte@lshtm.ac.uk)

Martin McKee *professor of European public health*

European Centre on Health of Societies in Transition, London School of Hygiene and Tropical Medicine, London WC1E 7HT

- 1 Eberstadt N. Mortality and the fate of communist states. *Communist Economics and Economic Transformation* 1993;5:499-517.
- 2 Stone DA. German unification: East meets West in the doctor's office. *J Health Politics, Policy Law* 1991;16:401-12.
- 3 Nolte E, Shkolnikov V, McKee M. Changing mortality patterns in east and west Germany and Poland: II. Short-term trends during transition and in the 1990s. *J Epidemiol Community Health* (in press).
- 4 Winston FK, Rineer C, Menon R, Baker SP. The carnage wrought by major economic change: ecological study of traffic related mortality and the reunification of Germany. *BMJ* 1999;318:1647-9.
- 5 Clark DE, Wildner M. Violence and fear of violence in east and west Germany. *Soc Sci Med* 2000;51:373-9.
- 6 Nolte E, Brand A, Koupilova I, McKee M. Neonatal and postneonatal mortality in Germany since unification. *J Epidemiol Commun Health* 2000;54:84-90.
- 7 Zatoński WA, Boyle P. Health transformations in Poland after 1988. *J Epidemiol Biostat* 1996;4:183-97.

- 8 Bobak M, Skodova Z, Pisa Z, Poledne R, Marmot M. Political changes and trends in cardiovascular risk factors in the Czech Republic, 1985-92. *J Epidemiol Commun Health* 1997;51:272-7.
- 9 Winkler G, Brasche S, Heinrich J. Trends in food intake in adults from the city of Erfurt before and after the German reunification. *Ann Nutr Metab* 1997;41:283-90.
- 10 Thamm M. Blutdruck in Deutschland—Zustandsbeschreibung und Trends. *Gesundheitswesen* 1999;61(suppl 2):S90-3.
- 11 Becker N, Boyle P. Decline in mortality from testicular cancer in West Germany after reunification. *Lancet* 1997;350:744.
- 12 Koupilová I, McKee M, Holčík J. Neonatal mortality in the Czech Republic during the transition. *Health Policy* 1998;46:43-52.
- 13 Junge B, Nagel M. Das Rauchverhalten in Deutschland. *Gesundheitswesen* 1999;61(suppl 2):S121-5.
- 14 Robert Koch-Institut. Pertussis—zur Situation in Deutschland. *Epidemiologisches Bulletin* 2000;17:135-9.

## Taking heart failure seriously

*Diagnosis and initiation of treatment are the aspects to concentrate on*

General practice  
p 1113

Heart failure is common, serious, and treatable,<sup>1,2</sup> so great efforts should be made to manage it correctly. In this issue Mason et al point out that fear of side effects may be a major barrier to the use of angiotensin converting enzyme inhibitors by general practitioners (p 1113).<sup>3</sup> However, management is not just about prescribing the correct treatment; it also involves obtaining a proper diagnosis.

An estimated 10 million patients in Europe have heart failure secondary to left ventricular systolic dysfunction.<sup>1,2</sup> They are dwarfed by the estimated additional 40 million who have symptoms and signs of heart failure<sup>2</sup> but in whom the diagnosis is subsequently refuted by investigation<sup>4</sup> or attributed to another cause such as “diastolic” heart failure,<sup>2</sup> a condition that is not known to respond to angiotensin converting enzyme inhibitors.<sup>5</sup> Only once a diagnosis of heart failure has been established and underlying left ventricular systolic dysfunction confirmed is treatment with a combination of angiotensin converting enzyme inhibitors and  $\beta$  blockers (Cochrane reviews in preparation) generally appropriate.

Who then should manage patients with suspected or confirmed heart failure? The diagnostic burden of

suspected heart failure is about 50 000 patients per million population, of which about 10 000 will have heart failure due to left ventricular systolic dysfunction.<sup>2</sup> Any plan that hopes to manage patients with suspected heart failure properly must involve many healthcare workers.

Most cases of heart failure are diagnosed during a hospital admission—56% according to surveillance studies in UK general practice<sup>6</sup> and 82% according to epidemiological data.<sup>7</sup> Presentation is often acute and secondary to myocardial infarction or to atrial fibrillation. An average British district general hospital can expect to manage over 1000 deaths and discharges related to heart failure a year,<sup>8</sup> and in many more cases the diagnosis will be suspected but refuted. In these cases diagnosis and initiation of treatment should be the responsibility of hospital doctors. Unfortunately, few patients are admitted under consultants with a specific interest in cardiovascular disease, and appropriate investigation or initiation of recommended treatment is often neglected.<sup>9</sup> Primary care physicians have an important role in identifying and rectifying these omissions.

Many suspected cases of heart failure will be seen in primary care that require the diagnosis to be excluded.

BMJ 2000;321:1095-6

bmj.com

A table of hypotensive events in various studies appears in bmj.com