

- Section_Professionals/des_goal_ education.asp [Accessed 5 July 2005]
- 29. World Health Organization. Therapeutic Patient Education. Report of a World Health Organization Working Group. WHO, Regional Office for Europe, Copenhagen, 1998; 1–77.
- 30. Frazier NL, Parker MS, Vincent PA. DiabetesResource Manual Nursing Personnel in Long-Term Care Facilities. East Carolina University, Copyrighted Greenville, 1995.
- 31. Kelley DB (ed). American Diabetes Education. Life with Diabetes (Core Outlines). University of Michigan. Diabetes Research and Training Center, 1997.
- 32. American Diabetes Association. Standards of medical care for patients with diabetes mellitus (Position Statement). Diabetes Care 2002; **25**(Suppl 1): 33-49.
- 33. American Diabetes Association. Standards and review criteria: national standards for diabetes patient education and American Diabetes Association review criteria. Diabetes Care 2002; 25(Suppl 1): 140-147.
- 34. European Nurses Diabetes Collaborative University Project

- (ENDCUP) Training the Nurse Trainers Certificate Programme. http://www.fend.org/proj.html [Accessed 5 July 2005]
- 35. Pearson L. Fourteenth annual legislative update: how each state stands on legislative issues affecting advanced nursing practice. Nurse Practitioner 2002; 27: 10-22.
- 36. National Certification Board for Diabetes Educators. http://www. ncbde.org [Accessed 2 July 2002]
- 37. International Diabetes Federation. International Curriculum Diabetes Health Education, 2002.
- 38. Olgun N, Ozcan S. Condition of Diabetes Nursing in Turkey, 38th National Diabetes Meeting and 4th National Diabetes Nursing Symposium, Antalya, 2002.
- 39. Diabetes: Cost and complications. http://www.diabetes.org.uk/ infocentre/fact/fact3.htm [Accessed 7 July 2005]
- 40. Songer TJ, Ettora L. The Economics Project Diabetes Publications and Products Studies on the Cost of Diabetes. http://www. cdc.gov/diabetes/pubs/costs/ appendices.htm [Accessed 7 July
- 41. Mussey VC, Lee JK, Crawford R, et al.

- African Diabetes urban in Americans: cessation of insulin is the major precipitating cause of diabetic ketoacidosis. Diabetes Care 1995; 18: 483-489.
- 42. Tumini S, Anzellotti MT, Chiarelli F. Camps for children with T1DM. Acta Bio Medica 2003; 74(Suppl 1): 32–34.
- 43. Olgun N. Diabetes education and National standards for diabetes selfmanagement education. In Yilmaz T, Bahçeci M, Büyükbese MA (eds). Modern Treatment Methods of Diabetes Mellitus, 1st edn. Istanbul: Bilmedya Group, 2003; 171-188.
- 44. Ozcan S, Olgun N. Nursing role in management of patients with diabetes. In Yilmaz T, Bahçeci M, Büyükbese MA (eds). Modern Treatment Methods of Diabetes Mellitus, 1st edn. Istanbul: Bilmedya Group, 2003; 189-223.
- 45. Özcan S, Olgun N, Pek H, et al. In Erdogan S (ed). Basic Information on Diabetes Nursing. Istanbul: Yüce Press, 2002; 1-213.
- 46. Renders CM, Valk GD, Griffin SJ, et al. Interventions to improve the management of diabetes in primary care, outpatient, and community settings: a systematic review. Diabetes Care 2001; 24: 1821-1833.

Eurowatch



prerequisite for healthy economies is healthy people. Just as we in Europe would do well to remember this as we endeavour to improve our economic well-being, so policies regarding our relations with, and development assistance to, countries in poorer regions of the

Delivering diabetes care in developing countries

John Bowis, MEP

world should put health at the top of the poverty alleviation agenda.

As HIV/AIDS, TB and malaria continue to spread and kill millions, it is right that the international community is mobilising financial and human resources to help - to prevent and to deliver drugs and vaccines. However, the challenge is much broader than the fight against these three diseases, devastating as they are alone. There is a raft of other diseases, mainly parasitic

which have been neglected, especially in terms of the research and development of new diagnostics and treatments.

Then there are non-communicable diseases, also neglected in developing countries. These include diabetes as well as mental illnesses. Taken together, the burden of disease is having a crippling effect, not just through the terrible mortality rates but also through the chronic illness and disability they cause.



Whilst it is true that different diseases require different solutions, there are responses common and fundamental to tackling all, including diabetes. Most important is health system capacity. There is little use having the drugs if there is no infrastructure to distribute and administer them; no personnel to diagnose, treat and care.

In April I was in Mali for the Joint Parliamentary Assembly of the European Parliament and the Parliaments of Africa, Caribbean and Pacific. This gave me the opportunity to see at first hand environmental and health challenges in that country. In Bamako, the capital, I visited the tiny teams who are struggling to cope with diabetes in that country.

In Timbuktu I could see no diabetes work, because there is none. The same is true of most of the country outside Bamako. Bamako the excellent NGO Santé Diabète Mali runs a diabetes centre with small teams of two doctors and four nurses. I also saw one of the two hospital units - again with a small team coping with 500 consultations a week between them. There are only two diabetes specialists for the whole country.

Mali is a country of 10 million. Two percent of the population live with diabetes - over 200 000 people. Yet outside Bamako, Sugaro Dun Bara (the disease of sugar) is largely undiagnosed and untreated. Where it is recognised, it is usually thought to be hereditary. It is complicated by local culture and tradition. Size matters in Mali. An overweight man denotes wealth and position; an overweight woman is a sign that she is being well looked after by her husband. Dietary control of diabetes is difficult when local practice is to eat with the hand and from a common dish - portions are therefore not easy to measure.

Oral antidiabetic drugs cost

350.00 Central African Francs a day. The average income is 1333.00 CAFs. Seventy percent of the 90% (type 2) of the 200 000 people with diabetes cannot afford the oral medication they need. They certainly cannot afford blood sugar personal testing equipment. Fiftyfive percent have serious eye disease, and blindness, kidney failure, amputations, high blood pressure and heart disorders are common.

One of the saddest moments of my visit was meeting a middle-aged man in the hospital. Eyesight going, kidney problems, arm and foot amputated, living (if that is the right word) in a very basic ward, he told me he had been high up in Government service in his day and had lived the good life; but now, he said, Je regrette amèrement'. He bitterly regretted the consequences of that lifestyle because he lived with little hope that treatment and care would restore him to anything like a full life.

Insulin has existed in the developed world since the early 1920s, yet people have still suffered because of a lack of access. Type 1 diabetes represents a small health problem compared to all the health challenges faced in places such as Sub-Saharan Africa. However, with a proper health system able to diagnose, manage and treat patients in tandem with delivery systems for insulin and related supplies, this disease would no longer be a death sentence for many in developing countries.

The elements needed to deal with diabetes are the same for many conditions: diagnostic tools, referral pathways, treatment protocols, effective drug procurement systems, affordable medicines, adherence to treatment guidelines, trained health care workers, patient education and community support; in short, the structures and services for health care delivery.

Scientific and medical progress



John Bowis (second left) with members of the health care team at the Diabetes Centre in Mali

will have knock-on beneficial effects for people living in developing countries and it is good news that the EU's next (seventh) Research Framework Programme for 2007-2013 has earmarked €8.3 billion for health research - with diabetes specifically singled out for 'translational research', i.e. basic research through to clinical trials through to new product development.

However, the governments of developing countries must reinforce health services and our aid must support their efforts to strengthen human and institutional capacity. Without the basics, so many will continue to be denied the treatments that already exist. Without the basics, we will not be able to share our advances and we will go on witnessing the downward cycle of illhealth and poverty - which is the greatest obstacle to economic progress and developing countries' participation as equal trading partners in the global economy.

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