Why developing countries need access to *cheap treatments for diabetes*

Mohga Kamal Smith

Ahmed was a farmer in the south of Egypt. He was diagnosed with diabetes by chance, but unfortunately too late. Although attempts were made to control his blood sugar, he went into a coma and died. Ahmed is one of the millions of people in developing countries who suffer from the double burden of poverty and disease. There is still a widespread misconception that non-communicable diseases such as diabetes are not relevant to poor people in developing countries. For these people, medicines for the treatment of such conditions are regarded almost as a luxury. Scientific evidence testifies to the contrary. Non-communicable diseases such as diabetes are escalating in developing countries. This is giving rise to severe economic as well as human consequences. An effective public health strategy for poor countries requires continued access to low-cost, high-quality generic medicines. However, new trade rules protecting intellectual property threaten to undermine the availability of the generic equivalents of much-needed new medicines.

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Diabetes: a disease of the rich?

It is estimated that more than half the world's newly-diagnosed cases of diabetes are in India and China.[1] Egypt has the same prevalence of diabetes as the US. The International Diabetes Federation (IDF) estimates that approximately 194 million people have diabetes worldwide, including over 120 million in developing countries. The number is predicted to double by 2025, with 70% of the increase occurring in developing countries.[2]

Diabetes affects poor as well as middle-class people everywhere in the world. In poorer countries, people living on or below the poverty line tend to be diagnosed later; they have less access to treatment and as a result suffer more acute and late complications than the rich. The majority of poor and even middle-class people in developing countries do not have health insurance and are forced to pay for medicines as they need them. Since diabetes is a lifelong condition, the cost of medicines can drive people living with diabetes into a downward spiral of debt and poverty. >>

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Why is the incidence of diabetes rising?

Socio-economic changes in developing countries play a major role in the rising incidence of chronic progressive diseases, including diabetes. Aging populations and rising levels of obesity associated with changes in diet and decreased physical activity, are contributing factors.

Poverty is driving people of all ages, including children, to work longer hours, especially in cities where low-paid hourly work is often all that can be found. Such workers depend on take-away food from street stalls where the traditional nutritious diet is being replaced by poor quality Western-style cooking that uses more fat, salt, sugar, and meat. The consumption of high-sugar, high-fat snacks by both rich and poor children is also increasing. Food advertising, especially on television, is contributing to the changes in diet in both urban and rural areas.

> Policy makers must approach prevention through education programmes.

Watching television has become a popular social activity in developing countries. Even in poor and remote areas, it may be the only recreational activity for children and adults. Children's time in front of television is at the expense of their normal play. In urban areas, children's physical activity is also constrained by the need to work, the lack of play space in urban slums, and the lack of facilities and attention to physical exercise in schools. Such changes to the diet and culture are contributing to increasing levels of obesity among adults and children. Obesity is now a public health problem in urban and some rural areas in middle-income countries such as India and China, as well as in poor countries such as Tanzania.[3] The incidence is increasing. For example, between 1978 and 1995, obesity in children under five years almost quadrupled in Egypt (a middle-income country) and increased 3.5 times in Haiti (a least-developed country).[4]

The increasing risk of developing diabetes and other chronic diseases is clearly linked to these factors. Policy makers must approach prevention through education programmes. Those affected are now at risk of developing the disabling complications of diabetes, and require treatment.

Access to medicines

Anti-diabetic products are essential life-saving medicines which can improve the quality of life and the productivity of people living with diabetes, and can decrease the risk of developing complications. The World Health Organization (WHO) estimates that 40% of people with diabetes need oral medicines and 40% need insulin injections.

However, it is estimated that only 3% of people with diabetes in developing countries are being treated.[5] This is partly because the majority of these people have to pay for their drugs out of their own pockets. In addition, health services are overburdened by the high cost of treatment. For example during 1989-90, the estimated cost of treatment for diabetes in Tanzania was 2.7 million USD, out of a total health-care budget of 47.2 million USD.[6]

> The new TRIPS agreement will keep the most effective medicines beyond the means of people in developing countries.

Generic medicines are usually far cheaper than brand-name medicines, and are therefore widely used by public-sector health services in poor countries. Countries such as Egypt promoted the development of a local generic drug industry, which provided

necessary medicines for their domestic markets and for export to other developing countries that do not have manufacturing capacity. Today, most low-income countries depend on the global market in generic drugs to drive down prices to an affordable level.

However, this situation will change in 2005. A trade agreement on intellectual property rights (TRIPS), negotiated through the World Trade Organization, will require that all members grant product and process patents for new medicines that will stand for 20 years. Although some countries do not have to comply until 2005 (or 2016 for least developed countries), many have already been pressurized to do so by US government bodies.

Although most of the diabetes drugs which are currently available will not be affected, under the new rules it will no longer be possible for generic companies to produce less-expensive versions of new drugs using process patents. The much-needed next generation of improved anti-diabetic medicines will not be manufactured at an affordable price. Treatment with these more effective products will therefore remain beyond the means of people in developing countries.

Insulin is particularly difficult to make available because of the need for daily injections and its relatively high cost. Insulin is difficult to manufacture to sufficiently consistent quality for therapeutic use. New, effective and easily administered insulins are offering the hope that people with diabetes and health services will benefit from shorter hospital stays, fewer complications, and improved quality of life.

Under the TRIPS agreement and US bilateral trade agreements, the price of new products will not be subject to price competition, and, given the costs of new drug development, will therefore be out of the reach of the poor. If diabetes is not to become a devastating affliction of the poor world, the problem of access to new drugs must now be recognized and resolved. Diabetes is but one example of the way in which the new global patent system, if allowed to go ahead without public health safeguards and alternative arrangements, will directly contribute to unacceptable inequities in health. Preventing access to necessary technologies through the application of over-rigorous patent rules will have developmental, economic and human-rights implications and may pose a threat to global stability.

Conclusion

Diabetes is a public health issue in developing countries, especially in urban settings. It is fuelled by rural-to-urban migration, and changes in diet and physical activity. Developing countries cannot afford to treat the increasing burdens of diabetic complications such as chronic kidney disease and blindness. Poorer women and men have higher rates of complications because diagnosis is later and management of the disease is poor.

Access to treatment is a huge problem for poor and middle-income people who cannot afford medicines. For these people, access to low-cost generic medicines can make the difference between a bearable life and disability and death. Insulin is a particular problem. Trade rules which delay generic competition will lead to increased prices of much-needed new medicines. Therefore, it should be a matter of priority, that trade rules on intellectual property rights be fair and flexibly applied in order to protect the needs and rights of people with diabetes in developing countries.

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Oxfam Health Policy Adviser Dr Mohga Smith was trained in Egypt and has been working for many years on health issues including access to treatment in developing countries.

References

1. McLellan F. Obesity rising to alarming levels around the world. *Lancet* 2002; 359: 20

2. World Health Organization. The Global Health Report. WHO, Geneva, 2001.

3. Kitange H. The worst of two worlds: Adult mortality in Tanzania. ID21, Published online 2001.

4. Ebbeling CB, Dorota B, Pawlak, David S, Ludwig. Childhood obesity: Public health crisis, commonsense cure. *Lancet* 2002; 360: 473-82.

5. www.who.int/inf-pr-1998/en/pr98-85.html

6. www.who.int/inf-pr-1998/en/pr98-85.html