INTERNATIONAL ETHICS

Therapeutic drug use in Bangladesh: policy versus practice

MOHAMMAD SAIDUL ISLAM

Jahangirnagar University, Dhaka, BANGLADESH Address for correspondence: 9 Packard Street, Berwick, Victoria 3806, AUSTRALIA email: bidyut_ju@rediffmail.com

Abstract

The National Drug Policy (NDP), 1982, of Bangladesh was expected to make available essential, good quality drugs at affordable prices. This article gives an overview of the situation today, more than two decades after the Drugs (Control) Ordinance, 1982, was promulgated to implement the NDP. While there have been some successes, many of the goals of this initiative are yet to be achieved. Inadequate supply of essential drugs, substandard quality, uncontrolled drug prices and inappropriate uses of drugs are major problems in Bangladesh.

Unethical drug promotion and marketing of substandard and unnecessary drugs in Bangladesh were very common before 1982. Instead of producing essential drugs, most drug manufacturers manufactured non-essentials such as vitamins, tonics, enzymes, gripe waters and cough mixtures. To stop these practices, Bangladesh formulated a pioneering National Drug Policy (NDP) in 1982 (1). The Drugs (Control) Ordinance, 1982, was promulgated subsequently to implement the NDP (2). The principal objectives of the NDP were to make available essential drugs; ensure good quality drugs; control drug prices; ensure rational use of drugs; develop an effective drug monitoring system; improve the standard of hospital and retail pharmacies; and ensure good manufacturing practices (1, 2). Before the NDP, eight multinational companies (out of 166 licensed companies) had about 75 to 80 per cent share of the drug market. Many of them abandoned their operations in Bangladesh after the NDP. Today, local pharmaceutical companies dominate the drug market with a share of more than 75 per cent (1). The NDP has had some success in regulating the drugs market of Bangladesh, but many of the goals of this initiative are yet to be achieved.

Access to essential drugs

Although official documents indicate that 80 per cent of the population has access to affordable essential drugs (3), there is plenty of evidence of a scarcity of essential drugs in government healthcare facilities. One study conducted in four district hospitals and one medical college hospital showed that only eight per cent of patients received the prescribed medicines from these facilities (4) In another report, two major hospitals in the capital city of Dhaka were operating without essential medicines for eight consecutive weeks (5). There are countless such incidents relating to the supply of essential medicines in Bangladesh. In most such cases, government officials and health professionals are responsible for the shortage as they often sell government-supplied drugs to local drug stores instead of dispensing them to poor patients (6). The government must be cognisant of this fact, but rarely takes any action.

Quality of available drugs

Of the 300 pharmaceutical companies in Bangladesh, only the 20 to 25 top ones produce drugs of standard quality (6). Reports show that numerous small companies market substandard drugs in the country (7). Fake or substandard medicines, including lifesaving ones, with an estimated worth of US$ 150 million per year, are flooding the domestic market (8). In its annual testing in 2004, the government laboratory detected 300 counterfeit or very poor quality drugs out of 5,000 drug samples. A recent assay involving 15 brands of ciprofloxacin showed that 47 per cent of samples contained less than the specified amounts of the active ingredient (6). Another report noted that 69 per cent of paracetamol tablets and 80 per cent of ampicillin capsules produced by small companies were of substandard quality (9).

Good manufacturing practice (GMP) is a major criterion to maintain standard quality in drugs, and it was one of the principal objectives of the NDP to ensure standard manufacturing practices for drug manufacturers. But there are some 265 pharmaceutical companies in Bangladesh that do not follow or comply with GMP (10). It is widely alleged that adulteration flourishes in the country because of poor government vigilance and supervision over drug manufacturers and sellers. Unfortunately, a section of corrupt physicians and government officials is involved in these underhand dealings. The government states that it has limited manpower and facilities to cope with the country's fast expanding pharmaceuticals sector (11). In fact, the regulatory authories have given scant attention to quality matters in Bangladesh.

Lack of control over drug prices

In Bangladesh the maximum retail price (MRP) of every essential drug is fixed by the Directorate of Drug Administration (DDA); for all other drugs the DDA endorses the companies' quoted prices (2). Drug prices are quite high in Bangladesh in comparison to neighbouring countries. The drugs control authority is apparently reluctant to negotiate with the companies to fix prices (12). The regulatory authorities have virtually no control over drug prices in Bangladesh.

Indiscriminate pricing can be observed in all therapeutic classes of drugs. For example, prices of various ciprofloxacin brands range from Taka (Tk) 5 to 14 (US$ 0.07 to 0.20) per unit (13). The price of dexamethasone eyedrops extends from Tk 24 to 90 (US$ 0.34 to1.29) per 5ml, and diclofenac eye drops are available at a price range from Tk 40 to 200 (US$ 0.57 to 2.86) per unit (6). These are a few of the existing price discrepancies in the country.

Patterns of drug use

To ensure rational and appropriate use of drugs in Bangladesh was another prime concern of the NDP. But there has been no drug use study in the country (14). Clinically inappropriate and inefficient use of medicines is a serious problem. More than half the medicines in Bangladesh are inappropriately prescribed, dispensed or sold (15). Despite legal prohibitions (1), numerous drugs with similar or no significant benefits are available in the market. As a specific example, there are seven members of the angiotensin-converting enzyme (ACE) inhibitors available in the country. The efficacies and chemical structures of these molecules are more or less similar, but their price vary significantly (13). The drug policy clearly prohibits the production of multi-ingredient preparations of vitamins and minerals with the exception of B-complex vitamins (1). But a mixture of 32 vitamins and minerals including selenium, vanadium, molybdenum, tin and many other unnecessary ingredients has been marketed in the country for a few years, violating the principles of the NDP. The need for these trace elements in Bangladesh is not established whereas nutritional deficiencies are mainly related to vitamins A and B-complex, iron, calcium, iodine and zinc (13). Irrational prescription and use of antibiotics are rampant throughout the country, with an estimated half of all antibiotics being sold without prescriptions (16). Self-medication is widespread, and all types of medicines can be purchased without a prescription (17). There are about 30,000 illegal (6) and 80,000 unlicensed (8) drug stores operating in the country. It is alleged that both legal and illegal drug dealers are engaged in selling fake, smuggled and adulterated medicines in the country (6).

Conclusion

Inadequate supply of essential drugs, substandard quality, uncontrolled drug prices and inappropriate uses of drugs are major problems in Bangladesh. The drugs control authorities should be better equipped and more vigilant to cope with the situation. Health professionals and drug manufacturers should be more committed in order to achieve the goals of the NDP.

References

1. Ahmed M. Effects of regulation on pharmaceutical market in Bangladesh. [cited 2007 Apr 30] Available from http://www.pharmadu.net/articlesdetail.php?art=2&pg=1.
2. Directorate of Drugs Administration (DDA), Bangladesh. [cited 2007 Apr 29] Available from http://www.ddabd.org/.
3. Government of Bangladesh and United Nations (UN) Country Team. *Millennium development goal (MDG) progress report* 2005. [cited 2007 Apr 29] Available from http://www.un-bd.org/undp/mdgs/Bangladesh%20MDG%20Progress%20Report%202005.pdf.
4. Omer K, Cockcroft A. *Bangladesh hospital improvement initiative: follow-up community based users' survey* (final report). CIETeurope; 2003. [cited 2006 Apr 30] Available from http://www.ciet.org/en/documents/projects_library_docs/200622410625.pdf.
5. Oxfam. Cut the cost: make vital medicines available for poor people (Bangladesh). [cited 2006 Apr 30] Available from http://www.oxfam.org.uk/what_we_do/issues/health/downloads/bangladesh.pdf.
6. Islam MS. A review on the policy and practices of therapeutic drug uses in Bangladesh. *Calicut Med J* 2006; 4(4): e2.
7. Roy J. The menace of substandard drugs. *World Health Forum* 1994; 15(4): 406-7.
8. Smith G. What FIP and WHO are doing to fight the problem of counterfeit drugs? *Pharm J* 2004; 273: 394-6.
9. Primo-Carpenter J. *A review of drug quality in Asia with focus on anti-infectives.* United States Pharmacopeia-Drug Quality and Information Program. Rockville, MD: Global initiative for quality medicines and their appropriate use; 2004 Feb.
10. Bangla2000.com. Most of 265 pharmaceutical cos do not follow GMP. [cited 2007 Apr 30] Available from http://www.bangla2000.com/news/Archive/Business/2001-02-22/news_detail2.shtm.
11. Spurious medicines. *New Nation* [Editorial] 2006 Sep 24. [cited 2007 Apr 30] Available from http://nation.ittefaq.com/artman/publish/article_31014.shtml.
12. Pinaki Roy. Essential drugs turn costlier. *Daily Star* 2005 Oct 13; 5(492): 1.
13. Chowdhury FR Ahasan HA, Rahaman MM. National drug policy of Bangladesh: some pitfalls in implementation. *J Coll Physicians Surg Pak* 2006; 16(5): 368-70.
14. Chowdhury AKA. Bangladesh core group report. *INRUD (International Network for Rational Use of Drugs) News* 2005; 15(1): 7-8.
15. Chowdhury FR, Rahman MM, Huq MF, Begum S. Rationality of drug uses: its Bangladeshi perspectives. *Mymensingh Med J* 2006; 15(2): 215-9.
16. Guyon AB et al. A baseline survey on use of drugs at the primary health care level in Bangladesh. *Bull World Health Organ* 1994; 72(2) :265-71.
17. Islam N, Goldman JD, Kunin CM. Ask the expert. *APUA (Alliance for the Prudent Use of Antibiotics) Newsletter* 1996; 14(2): 5