

Regulatory system strengthening

Report by the Secretariat

BACKGROUND

1. The Millennium Development Goals and the drive for universal health coverage require that patients have access to quality-assured medical products. Medicines and medical products play a major role in protecting, maintaining and restoring people's health. The provision of appropriate medical products of assured quality, in adequate quantities and at reasonable prices, is therefore a concern of global and national policy-makers and agencies implementing health activities and programmes.

2. Every government allocates a substantial proportion of its total health budget to medical products. Between 20% and 60% of the health budget in low- and middle-income countries is used for expenditure on medicines and health technologies. Governments therefore have a strong incentive to ensure that this investment is justified, and need strong national regulatory authorities to ensure that the manufacture, distribution and use of medicines and other health technologies are regulated effectively, and that all such products are accompanied by appropriate information to promote their rational use. The regulation of medical products covers the totality of all measures – legal, administrative and technical – that governments take to ensure the safety, efficacy and quality of medical products. These activities vary from country to country, both in scope and implementation, but generally include at least the following functions:¹

- licensing the manufacture, import, export, distribution, promotion and advertising of medicines and medical products;
- assessing the safety, efficacy and quality of medical products, and issuing marketing authorization;
- inspecting, and conducting surveillance of, manufacturers, importers, wholesalers and dispensers of medicines and medical products;
- controlling and monitoring the quality of medical products on the market;

¹ Effective medicines regulation: ensuring safety, efficacy and quality. Geneva: World Health Organization; 2003 (WHO Policy Perspectives on Medicines).

- controlling the promotion and advertising of medical products;
- monitoring adverse reactions to medicines and medical products;
- providing independent information on medicines to professionals and the public.

3. In order to fulfil these tasks, national regulatory authorities need to be competent, capable and technically independent, with strong political back-up. They also need to be invested with clear authority and to be supported by legislation that enforces established regulations. Governments must provide financial support in the form of financial and other resources that are commensurate with the designated functions and that permit the employment, retention and continuous education of a sufficient number of staff with the necessary skills for undertaking the functions that have been designated by the government.¹

REGULATORY CHALLENGES

4. Worldwide there are growing consumer expectations and demands concerning the safety of health technologies. While it is acknowledged that any medicine or medical product will have side-effects, it is important that the regulatory authority runs an effective safety monitoring programme that captures the occurrence of possible side-effects and can communicate with health professionals and the general public in order to mitigate any negative consequences.

5. It is increasingly evident that all regulatory bodies, regardless of their size, lack financial or other resources to perform all the regulatory functions required to ensure the quality, safety and efficacy of the medical products in their markets. According to the Institute of Medicine of the United States National Academies, even well-resourced regulatory authorities, such as the Food and Drug Administration in the United States of America, cannot do their job well without substantive improvements in the capacity of counterpart agencies in emerging economies. In order to deal with this issue, many countries are charging the manufacturers and suppliers for licences and regulatory activities, which may lead – under inappropriate governance structures – to a changing relationship between national regulatory authorities and suppliers. The independence of regulatory bodies may be affected as a result.

6. The increased autonomy of management within the political responsibility of governments, and the complexity of decision-making in national regulatory systems linked with governments, together with greater interaction between regulators and the regulated private sector in the development of standards and regulations, have given rise to concerns from other parties, such as civil society, health professionals and patient groups, about potential conflicts of interest and a lack of transparency.

7. Many developing countries have a domestic production capacity for generic medicines and some relatively simple medical products. However, their regulatory systems may not be sufficiently developed to adequately regulate and control these suppliers. Another complexity resides in the fact that many new medical products that are under development are biologicals. Moreover, whereas the regulation of medicines and vaccines is now scientifically well developed, there are important gaps concerning regulation of other classes of products, for example medical devices, which in many countries are not regulated at all. Despite the fact that an estimated 1.5 million different medical

¹ Marketing authorization of pharmaceutical products with special reference to multisource (generic) products: a manual for National Medicines Regulatory Authorities (NMRAs) – 2nd ed. WHO, 2011.

devices in more than 10 000 generic device groups are available worldwide, of the 161 countries responding to the 2010 Baseline country survey on medical devices 55 did not have a regulatory authority for medical devices, 87 did not have a national health technology policy and 93 did not have national lists of approved medical devices for procurement or reimbursement.

8. Increasingly, pharmaceutical companies are moving their clinical trials activities to developing countries that may not have the capacity to ensure adequate review of the ethical and clinical issues related to the trials. Although the growth in research and development on new medical products in developing and emerging countries is an important and welcome development, this should take place in the context of full compliance with the highest ethical standards and under proper regulatory oversight.

9. With globalization and the growing international trade of pharmaceutical products it has become increasingly difficult for regulatory systems to adequately control the production and distribution of medical products, and to trace their origin. It is not uncommon for several companies to be involved in producing a medical product, and for the product to move through several countries and several distributors before finally reaching the patient. The processes for the production and distribution of medical products are complex and difficult to control. As a result, they are vulnerable to problems with quality, causing them to be an important contributor to the occurrence of substandard/spurious/falsely-labelled/falsified/counterfeit (SSFFC) products in international supply chains.

APPROACHES TO MORE EFFECTIVE REGULATION

10. Like any other part of health system, the regulatory systems for medical products need a qualified workforce. Making solid, scientifically sound judgments about the safety, efficacy and quality of medical products is increasingly complex – even qualified health care professionals such as pharmacists and medical doctors cannot exercise this function without specialized training. Although WHO has been providing, and will continue to provide, capacity building and training in various areas of health products regulation, a more systematic approach is needed, through the establishment of globally recognized core curricula for regulators. WHO and its partners are aiming to address this gap and design core curricula for regulators that can be used in a modular way to train the various needed regulatory specialists.

Addressing technical challenges and improving regulatory capacity

11. Countries will need to develop and implement effective control over the products manufactured and/or used within their jurisdiction. They may do this independently or collectively through networks of regulatory authorities, and make use of the international regulatory guidance and instruments. Developing medical products and proving their safety, efficacy and quality requires the application of the latest scientific advances. As a result, regulators need a substantial regulatory and scientific capacity. In the future, therefore, rather than trying to assess all health products independently, countries may choose to rely on regulatory networks for sharing information, knowledge and work. Countries will need to assess carefully those functions that they want to undertake directly themselves and those that can be performed more effectively and efficiently by others or in collaboration with others.

Strengthening governance

12. Good governance in the pharmaceutical sector is needed in order to improve health, health service delivery and access to good-quality, affordable medicines. It is also important in terms of the contribution it makes to universal health coverage, by reducing inefficiencies, unethical behaviour and corruption. The relevant structures and processes for efficient implementation of medicines policies and the enforcement of laws and regulations need to be established at national level. In this way, the transparency, accountability and ethical management of pharmaceutical systems can be increased, public trust and confidence in the health system improved and the misuse of public, patients' and donors' funds prevented.

Addressing challenges linked to globalization

13. In order to improve the regulation of medical products globally and ensure that the medical products that patients use are of assured quality, more emphasis needs to be placed on regulatory convergence and harmonization, which offers numerous benefits to both regulatory authorities and the pharmaceutical industry, and which has a positive impact for the protection of public health. Stimulating and/or initiating collaboration between regulators from various countries on regulatory activities based on converging and harmonized technical standards is becoming more and more important. The Member State mechanism on substandard/spurious/falsely-labelled/falsified/counterfeit medical products is very important for supporting the overall strengthening of regulatory systems in order to overcome the challenge posed by SSFFC medical products circulating on the global markets.

14. The objective and independent assessment of regulatory systems is of critical importance prerequisite for the strengthening of regulatory capacity, enabling investments for enhancing systems' performance to be prioritized. Building functional national regulatory systems is a complex task that requires political will and the allocation of necessary financial and human resources. The Secretariat will continue to provide support to Member States in assessing their national regulatory systems with the aim of identifying gaps and, in cooperation with national counterparts, to develop institutional development plans in order to close these gaps. The assessment of regulatory systems also needs more comprehensive and complex methods and tools in order to keep pace with the evolution of the systems themselves. In cooperation with national regulators, WHO is working towards validating a single, comprehensive and up-to-date global assessment tool that can be adjusted to the needs of regulators in different country settings.

WHO'S ROLE AND ACTIVITIES IN THE REGULATION OF MEDICAL PRODUCTS

15. The Secretariat plays an important role in global medicines regulation in the following areas.

- **Norms and standards.** WHO establishes necessary norms and standards through its expert committees and groups (such as the Expert Committee on Specifications for Pharmaceutical Preparations, the Expert Committee on Biological Standardization, the International Nonproprietary Names Expert Group and the International Working Group for Drug Statistics Methodology). For drug utilization research WHO issues Anatomical, Therapeutic and Chemical or ATC codes and Daily Defined Doses or DDDs.
- **Capacity building.** WHO supports regulatory capacity-building, which involves the following activities: assessing regulatory activities at country level; identifying gaps; supporting the formulation and implementation of institutional development plans to close the

gaps, combined with the provision of technical training courses; and providing customized technical support to countries.

- **Prequalification.** WHO ensures the quality, safety and efficacy of selected priority essential medicines, diagnostics and vaccines through prequalification. Although primarily used to guide purchases by United Nations procurement bodies and international donors, WHO's prequalification programme also contains a very strong element of building local quality assurance capacity, through the hands-on training of developing-country regulators.
- **Limitations of the capacity and mandate of the WHO prequalification programme.** The WHO prequalification programme has been successful in supporting international procurement agencies and developing countries through the assessment of the safety and quality of most types of vaccines, medicines for HIV/AIDS, tuberculosis and malaria, diagnostics for the same infectious diseases and reproductive health commodities. However, the Secretariat has no capacity to expand the prequalification programme to include all products of public health importance; nor does the Organization have the mandate to become a supranational regulatory body. There is therefore a need to define other models to ensure the safety and quality of the health technologies that are needed in countries with limited regulatory capacity and where no products prequalified by WHO are available.
- **Enhancing and transitioning prequalification.** Building on its prequalification programme, the Secretariat is enhancing support of regulatory collaboration, work-sharing and harmonization in order to make best use of each Member State within regional groupings. This effort will gradually lead to the establishment of a functional network of regulatory authority networks that, in the long term, could take joint responsibility for the prequalification of medical products, including medicines, vaccines, diagnostics and medical devices, for United Nations, international or regional procurement. This gradual transfer of responsibility for the quality assessment of medical products from WHO to networks of regulatory authorities needs to be based on uniform quality standards. In the short to medium term, WHO will continue to improve its prequalification programme, which includes a strong capacity-building component for national regulators. The Secretariat has started to work on new models for ensuring the sustainable financing of prequalification-related activities.
- **Pharmacovigilance.** Together with the WHO Collaborating Centre for International Drug Monitoring (The Uppsala Monitoring Centre), WHO promotes the implementation of safety monitoring programmes at the country level and their international collaboration. More than 135 countries are currently part of the WHO pharmacovigilance programme. In order to tackle vaccines safety issues in 2011, WHO and its partners established the Global Vaccine Safety Blueprint, which proposes a strategy for strengthening vaccine safety activities globally.
- **Networking and information exchange.** WHO plays a very important role in facilitating the exchange of regulatory information and enhancing international collaboration among regulators, through global and regional networking, such as the African Medicines Regulation Harmonization Initiative, and the WHO/PAHO network of regulatory authorities in the Americas – Pan American Network for Drug Regulatory Harmonization. Since 1980, WHO has convened the International Conference of Drug Regulatory Authorities every two years and has published its proceedings. The conferences offer Member States' national regulatory authorities a forum in which to discuss ways of strengthening collaboration. They have been instrumental in making recommendations to regulatory authorities, WHO and stakeholders, and in determining priorities in the national and international regulation of medicines and

vaccines. WHO cooperates actively with the regulatory authorities of all its Member States in order to facilitate the spread of best practice and experience. Through its observer role in different international convergence and harmonization initiatives, such as the International Conference on Harmonization of Technical Requirements for the Registration of Pharmaceuticals for Human Use, WHO liaises with members and non-members, enhancing information exchange and collaboration between industrialized countries, countries with emerging economies and developing countries.

16. Since 2000, WHO/PAHO Member States have been collaborating to develop capacity in health technology regulatory systems through the Pan American Network for Drug Regulatory Harmonization. The Network has developed and adopted nine technical harmonized documents in key regulatory functions and has adopted a Strategic Development Plan for the development of regulatory systems in the Americas that focuses on: (i) improving regulatory systems governance; (ii) prioritization in the development and application of technical norms; (iii) development of a professional regulatory curriculum; and (iv) promotion of regulatory information exchange through the Regional Platform for Access and Innovation in Health Technologies. These priorities build on resolution CD50.R9 on strengthening national regulatory authorities for medicines and biologicals, adopted by PAHO's 50th Directing Council (September 2010), where countries in the Americas considered that the designation of national regulatory authorities of regional reference could lead to regional cooperation between Member States.

17. In 2013 the Regional Committee for Africa at its sixty-third session discussed a report on strengthening the capacity for the regulation of medical products in the African Region,¹ and the Regional Office is actively working with Member States and the various (sub)regional initiatives to enhance collaboration among the regulatory authorities.

18. Similar regional initiatives are being developed or are under implementation in the South-East Asia, Eastern Mediterranean and Western Pacific regions aiming at increased collaboration, capacity building and information exchange. The highly integrated regulatory system of the European Union and its Member States helps to provide guidance to many of the regional networking initiatives.

ACTION BY THE EXECUTIVE BOARD

19. The Board is invited to note this report.

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¹ Document AFR/RC63/7.