Input for ENVI Own Initiative Report on Access to Medicines

Introduction

Promoting health and well-being is one of 17 Global Goals that make up the 2030 Agenda for Sustainable Development. The Sustainable Development Goal (SDG) 3 aspires to achieve universal health coverage and provide access to *affordable, safe and quality* medicines and vaccines for all[1]. Supporting medical research and development and ensuring access to affordable and appropriate medicines in all countries - whatever their level of economic development is - is essential for the world to meet SDG 3 on health.

Health is considered our most basic and essential asset[2]. The right to health includes access to timely, acceptable, and affordable health care of appropriate quality[3]. It is the duty of States to ensure that the right to health is realised like all Human Rights, in a non-discriminatory manner where no attribute, including property, birth or status can affect one's ability to fulfil their rights.

Though the challenge of access to medical tools has long been a concern for low- and middle-income countries, high prices now threaten equitable access to treatment in the world's wealthiest countries, including Europe, where treatment for life-threatening infections and diseases, like HIV/AIDS, cancer and hepatitis C, are increasingly unaffordable for both individuals and national health systems.

This is the result of an ineffective and costly research and development (R&D) system that rewards new medicines with fixed-term monopolies (patents) and encourages unaffordable price setting, while patents, which were initially set to incentivise innovation, increasingly fail to do so.

Inefficiency is also driven by the secrecy and lack of transparency within the current R&D model which results in research being duplicated and makes it hard for health systems to negotiate prices since they do not have access to data on both the true costs of R&D and clinical trial results.

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[1] UNGA 2015, Transforming our World: The 2030 Agenda for Sustainable Development. Resolution A/RES/70/1 point 26 https://sustainabledevelopment.un.org/post2015/transformingourworld

[2] Office of the United Nations High Commissioner for Human Rights, "The Right to Health" Fact Sheet No.31 http://www.ohchr.org/Documents/Publications/Factsheet31.pdf

[3] Office of the United Nations High Commissioner for Human Rights, "The Right to Health" *Fact Sheet No.31* http://www.ohchr.org/Documents/Publications/Factsheet31.pdf

The current R&D model is failing to deliver the medical needs of people it purports to serve and what is delivered is often lacking in added-therapeutic value compared to what already exists on the market or is so high-priced that it is unaffordable for both individuals and health systems.

The failure of current incentives for medical innovation

Patents are abused to set high medical prices

- The current medical research and development (R&D) model rests on the incoherence between the right to health and monopoly interests of intellectual property (IP) right holders, where the market, rather than public health needs, is the driving force of health technology production;
- The patent-based system grants pharmaceutical companies with monopolies (for at least a period of 20 years), which allow them to charge exorbitant prices for health technologies totally unconnected to the cost of developing them[4]. In addition, other types of monopolies, such as data and market exclusivity are introduced, for example, with the Orphan drugs regulation in Europe, to recoup their investments;
- While patents were originally intended to stimulate innovation, pharmaceutical industry is increasingly seen to abuse the monopoly status on the market to set high prices on new medical tools for as long as possible, which leads to rationing of treatment in high and middle and low-income countries and, as a consequence, excludes groups of patients from access to new unaffordable medicines.

Current innovation model is based on profits not needs

- As biomedical innovation takes place within a framework that prioritises R&D not according to public health needs, but according to the profits that stands to be made, investment only goes into areas of research where a high return on investment can be expected while the profitability of a product relies on two things: volume of sales and high prices;
- As a result, diseases that primarily affect poor people (e.g. tuberculosis, neglected and poverty-related diseases, rare diseases like Ebola, etc.) and where there is little financial incentive to develop and test new treatments are largely ignored. For example, in the last 40 years we have only produced 2 new treatments for tuberculosis, the biggest infectious disease killer in the world, taking 1.5 million lives in 2014 alone, but 14 new medicines for high fever have been produced within the same time period[5];
- A 2013 study reported in The Lancet[6] found that 26 poverty-related and neglected diseases contributed to 14% of the global disease burden, but received only 1.4% of the global health-related R&D expenditure.

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[4] Access Denied: Report of the Inquiry of the All Party Parliamentary Group on HIV and AIDS into access to medicines in the developing world, December 2014 http://impactaids.co.uk/wp-content/uploads/ACCESS-DENIED-APPG-Report-1.12.14.pdf

[5] Debate at the UK Parliament (Commons), Mr Peter Hain (Neath) (Lab), 8 July 2014: http://www.publications.parliament.uk/pa/cm201415/cmhansrd/cm140708/halltext/140708h0002.htm?dm_i=6N7,2M284,GPCQXA,9LHU3,1

[6] Von Philipsborn P, Steinbeis F, Bender ME, Tinnemann P. Research and development expenditure

Patents based innovation model does not encourage real innovation

- With profits as main goal, pharmaceutical companies are more inclined to make subtle changes to existing compounds and remarket them under a new brand name, as a result of which medical market is flooded with "me-too" drugs, which draws into question the logic behind patents as a reward for 'novel' ideas[7]. For example, the independent Drug Bulletin Prescrire has assessed the added-therapeutic value of 1345 drugs between 2000 and 2013 and found that only 7% offered 'a real advantage' when compared to drugs already on the market[8];
- Alternative incentive models that de-link the financing of research from drug sales and drug prices - such as innovation prizes and conditional public funding with requirements for affordability, suitability and public health precursor - do exist and have proven to be very effective, such as, for example, Drugs for Neglected Diseases Initiative (DNDi)[9]
- These incentive models may require more upfront public investment and political leadership, but given that only a very small percentage[10] of new drugs put on the market offer a therapeutic benefit, while in some cases being priced very expensive, there is an argument to be made about how the public money is best spent

Recommendations

- Examine how industry is using patents and licensing and establish whether patents hinder innovation as regards treatments for diseases where there is no profitable market, such as rare diseases or poverty related diseases;
- Explore alternative biomedical innovation and financing models that do not rely on high prices for its financing i.e. models that separate the cost of R&D from the end price of the product (de-linkage), with clear access conditions such as: innovation prizes, conditional grants, open and collaborative models of innovation with open access to data and results;
- Demand more stringent proof of therapeutic advance before authorising new medicines into the market;

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for poverty-related and neglected diseases: an analysis of economic and epidemiological data, The Lancet. 2013; 382(Special Issue):7

[7] T. Fojo T et al, Unintended consequences of expensive cancer therapeutics – the pursuit of marginal indications and a me-too mentality that stifles innovation and creativity, JAMA Otolaryngology Head and Neck Surgery, 2014

[8] Prescrire (2014); 34 (364):132-136 'New drugs and indications in 2013: little real progress but regulatory authorities take some positive steps' available at http://www.ncbi.nlm.nih.gov/pubmed/24860905

[9] Public and private contributions pay for the cost of R&D upfront, allowing DNDi to independently identify needs, gaps, and priorities based on patient needs. As there is no need for a return on investment, DNDi prices products at the 'lowest sustainable price.' To date, with total expenditures of US$285 million, DNDi has delivered six new treatments for four diseases (malaria, sleeping sickness, visceral leishmaniasis, and Chagas disease) that are affordable, adapted, and non-patented. As such, the DNDi model is a practical illustration of how R&D can be conducted in the public interest, if a de-linked approach is implemented.

[10] The independent Drug Bulletin Prescrire has assessed the added therapeutic value of 1345 drugs between 2000 and 2013 and found that only 7% offered 'a real advantage' when compared to drugs already on the market Source: Prescrire (2014); 34 (364):132-136 'New drugs and indications in 2013: Little real progress but regulatory authorities take some positive steps' available at http://www.ncbi.nlm.nih.gov/pubmed/24860905

- Establish conditionality and claim co-ownership of IP for projects funded by EU grants;
- Commit to implement the principles and recommendations of the WHO Consultative Expert Working Group on Research and Development: Financing and Coordination (CEWG) report in its R&D policy and funding, in particular:
    - Support and provide financial means for the the creation of a Global Observatory for R&D to track spending, identify areas of health needs and encourage coordinated research efforts into priority areas through open-source research to deliver safe and effective medicines that offer real therapeutic progress;
    - Replace the market incentive to produce new health technologies with financial compensation that is sourced and managed by the public in the form of push and pull funding through a Global Observatory on Health R&D
    - Promote a new global biomedical R&D agreement which would include:
        - Committing increased public funds to support a needs-driven approach to pharmaceutical R&D that delivers affordable health technologies while ensuring both transparency and public return for public investment;
        - Funding new R&D initiatives which delink the real costs of R&D from the end price.

The need of transparency in price setting, clinical trials and R&D costs

- Inefficiency of the R&D model is also driven by the secrecy and lack of transparency which results in research being duplicated or high transaction costs for getting access to previous clinical trial data under data exclusivity protection;
- Due to the lack of transparency, it is harder for health governments to negotiate prices since they do not have access to data on the true costs of R&D and clinical trial results;
- Countries should not agree to confidentiality agreements with companies as it is impossible to know if countries are getting a 'fair deal' when negotiating behind closed doors;
- 'Tiered pricing' or 'differential pricing' – a practice of selling drugs to different countries at different prices depending on their socio-economic status - increasingly promoted by the European Commission and pharmaceutical companies, is not a solution for access, as the price countries are asked to pay does not necessarily correspond to the level of socio-economic development of the individual countries[11];
- As tiered pricing policies rely on a complete lack of transparency and companies are given the (inappropriate) role to decide which country has to pay what, it serves as a business strategy that allows pharmaceutical companies to maximise their profits in all countries since prices are determined according to the highest price a country/or a segment within a country is willing to pay.

[11] The Right Shot: Bringing down barriers to affordable and adapted vaccines, MSF, January 2015, http://www.msfaccess.org/content/right-shot-bringing-down-barriers-affordable-and-adapted-vaccines

Lack of transparency in R&D costs

- While the pharmaceutical industry justifies its high prices due to the high costs of developing new drugs, there is absolutely no transparency of the R&D costs. A recent study by Tuft Centre in the US claimed that the cost of developing a new medicine was a staggering 2.6 billion US$[12], while not-for-profit experience by the Drugs for Neglected Diseases Initiative (DNDi) has shown that a new drug can be developed for an estimated cost of 50-186 million US$[13];
- In addition, public investment in R&D is massive (around 30-40% of R&D spending is paid by the taxpayer or by philanthropy[14]), but R&D strategies are not managed in the public interest, as taxpayers pay twice for their medicines - first for a big part of the research via public funds, then they have to pay again for the high price of the medicines, which shows that there is no return on public money that goes into medical R&D;
- We should seek to put conditions on the financing of medication development: if the research and development of medicines is funded by public money, taxpayers should somehow share the profits. Governments should be held responsible by taxpayers to address public health needs if they use public money to invest in medical R&D;
- The taxpayer should have detailed information on public investment and also tax incentives for R&D in order to ensure as well traceability of those projects that result in marketed health technologies. The package should also include detailed data including clinical trials results and R&D cost structure of pharmaceuticals financed wholly or partially with public funds.

Recommendations

- More transparency should be required on pharmaceutical R&D and medicine price setting by:
  - Fully disclosing and tracking public funding for pharmaceutical R&D
  - Attaching transparency provisions to EU funded medical R&D to ensure the real costs of R&D are disclosed
  - Promoting open access to all research data
  - Establishing a publicly accessible database where health systems publish the price of medicines that they negotiate;
- Ensure the transparency of measures established by EU countries to control the pricing and reimbursement of medicinal products are included in new legislative initiatives;

[12] Drug Research And Its Discontents: Does It Really Cost $2.6 Billion To Research A New Medicine?, Forbes, December 2014, http://www.forbes.com/sites/theapothecary/2014/12/04/drug-research-and-its-discontents-does-it-really-cost-2-6-billion-to-research-a-new-medicine/

[13] R&D cost estimates - MSF response to Tufts CSDD study on cost to develop a new drug, MSF, 2014, http://www.msfaccess.org/content/rd-cost-estimates-msf-response-tufts-csdd-study-cost-develop-new-drug

[14] The Lancet, Mapping of available health research and development data: what's there, what's missing, and what role is there for a global observatory?, 2013, http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)61046-6/abstract

- In order to guarantee the return of public investment, public interest safeguard criteria must be introduced for all biomedical R&D investments made by the EU. These criteria cover the price of the final product, patient access to these products and ownership of the innovation itself;

Patients safety should be the priority

- Patients should have timely access to treatments but schemes of earlier marketing authorization should not undermine patients' safety; faster track approval procedures should only be used for a very limited range of drugs and only where there is an unmet medical need;
- The ongoing European Medicines Agency (EMA) pilot project on adaptive pathways, poses serious concerns among the public health community on the questionable innovative value of these medicines, on patient safety and the affordability of these products;
- Currently, post marketing studies of medicines conditionally authorised in EU are not honored by pharmaceuticals companies, which provide data with substantial delay and in a fragmented manner[15]This poses severe threats to patient's safety as medicines remain on the market with limited information on their efficacy and safety for several years;
- In addition, the pilot project on adaptive pathways is undermining the democratic process. Since the launch of the project in 2014, little and contrasting information have been provided by EMA. Any public debate or consultation has been organized, despite the persistent requests from many public health organizations.

Recommendations

- There should always be a robust evaluation of medicines benefits and harms before granting marketing authorization, in order to ensure high level standards on quality, safety and efficacy of medicines;
- Fast track approval procedures should be restricted to situations of unmet medical need;
- Robust post-marketing surveillance is of utmost importance; compliance with pharmacovigilance commitments should be ensured and sanctions applied, when companies fail to do so.

[15] Banzi R, Gerardi C, Bertele' V, Garattini S. Approvals of drugs with uncertain benefit–risk profiles in Europe. Eur J Intern Med 2015; 26: 572–84; Hoekman, J., Klamer, T. T., Mantel-Teeuwisse, A. K., Leufkens, H. G. M., and De Bruin, M. L. (2016) Characteristics and follow-up of postmarketing studies of conditionally authorized medicines in the EU. Br J Clin Pharmacol, doi: 10.1111/bcp.12940.

Access to affordable medicines should be promoted in trade policies

- Promoting generic and biosimilar competition is an efficient way to address the impact that monopolies have on affordability which would require the reinvigoration and active encouragement of all countries to fully implement TRIPS (Trade-Related Aspects of Intellectual Property Rights) flexibilities;
- The Agreement on TRIPS sets the standards for intellectual property protection, while TRIPS-plus means that the rules go further than what is mandated by the World Trade Organisation (WTO) in the TRIPS agreement (examples of TRIPS Plus include patent term extensions (normally 5 years), data exclusivity periods up to 11 years (i.e. stronger protection of clinical trial data), in-transit enforcement of intellectual property);
- The European Commission has a long history of including TRIPS-plus rules and standards for intellectual property as part of its bilateral trade negotiations, which lead to longer and stronger monopolies, and restricts the possibilities to explore alternative incentive models such as innovation prizes, conditional public funding, de-linkage (in particular in combination with an ISDS mechanism);
- Prospective and retrospective impact studies confirm[16] that TRIPS-plus rules restrict access to affordable medicines by extending the patent period and making it more difficult for generic producers to enter the market which has dramatic public health consequences in developing countries over time [17].

Recommendations

- Make sure that EU bilateral trade agreements do not contain TRIPS-plus provisions on intellectual property –to ensure that EU trade policies do not restrict access to medicines in third countries and undermines the EU's own development policies in these countries, but also to ensure that there remains policy space for future changes in R&D incentives and policies;
- Secure affordable prices through supporting generic competition and strengthening the use of TRIPS flexibilities in all countries
- Support government that make use of TRIPS flexibilities support access to medicines and to encourage local generic production

[16] The Effects of TRIPS-Plus IP Provisions on Access to Affordable Medicines, InfoJustice, 2015 http://infojustice.org/wp-content/uploads/2015/06/Effects-of-TRIPS-Plus-IP-Provisions-on-Access-to-Affordable-Medicines.pdf

[17] Trading away access to medicines revisited: How the European trade agenda continues to undermine access to medicines, HAI/Oxfam briefing paper, September 2014, p. 16 http://haiweb.org/wp-content/uploads/2015/09/Trading-Away-Access-to-Medicines-Revisited.pdf