



Universidades Aliadas por Medicamentos Essenciais

UAEM welcomes the GSPAR

Universities Allied for Essential Medicines, a student organization that advocates for access to medicines developed by universities, welcomes the **Global Strategic Plan on Antimicrobial Resistance** as an important step on addressing this major health issue.

AMR and University R&D

In designing a new antimicrobial agent, the best way to ensure the longevity of the drug against premature resistance is to develop a completely novel class of antimicrobial with a new mechanism of action that organisms have not yet encountered. However, of the small number of potential drug candidates, many are reformulations of existing drugs, which are faster, cheaper, and easier to produce than a completely new class of antimicrobials.

In the case of antibiotic drugs, most of the classes we have today were developed during the period of 1940-1980, nicknamed the “golden age of antibiotics”, and the last truly novel classes of drugs was discovered in the 1980s – to which resistance has been documented.

De-linkage as a foundational tool

The problem with R&D lies on how priorities are established by the potential returns of investment of a drug candidate, and antimicrobial agents possess intrinsic and extrinsic factors that make it less lucrative than other types of drugs. These factors include the short treatment course of antimicrobials, the potential for discontinuation due to the emergence of a resistance, and the global and regional differences in disease burden and market potential.

Thus, in order to foster the much needed research and development of new antibiotics, alternative models must be applied that effectively de-link sales of medicines from their R&D costs.

The CEWG Report makes clear references to the principle of delinking Instead of that the draft GAP proposes “international collaboration, strengthening of existing and creating new public private partnership for R&D, piloting innovative ideas for financing such R&D and for the adoption of new market models to encourage investment and ensure access to new antimicrobial products”.

Third World Network, 2014

De-linkage aims to resolve this conflict by providing pharmaceutical companies an alternate source of financing to recover their R&D costs and generate revenue. It would create market incentives to invest in R&D into new antimicrobial research, prevent overuse of the drug, and set prices that would promote global access to the drug without compromising revenue for the companies (Outterson, 2014).

Two such de-linkage proposals, “push” fundings and “pull” incentives, aim to foster innovation by providing alternate sources of R&D financing. “Push” fundings would pay for R&D at the onset by providing start-up resources. Examples of push funding include public-private partnerships (e.g. Innovative Medicines Initiative, a joint partnership between the EU and the industry), increased public funding (US NIH’s proposed National Centre for Advancing Translational Sciences), and philanthropic sources (e.g. Bill and Melinda Gates Foundation).

On the other hand, “pull” incentives pay for R&D at the outset upon market entry through prize funds and Advanced Market Commitment that would guarantee a market that would purchase the drug, such as the GAVI, the Vaccine Alliance.

“Delinking, which can happen in a number of different ways, is a means of divorcing the funding of R&D from product pricing. Once a patent has expired, delinking occurs naturally because generic competition should bring the price down to levels determined by market conditions and the cost of production rather than by R&D costs”.

CEWG, 2012

Our recommendations to the Member-States towards addressing antimicrobial resistance are:

- Adopt innovative research and development strategies, especially those that involve de-linkage mechanisms (as defined by the CEWG, 2012);
- Incentivize needs-driven R&D, thus focusing on research directed at new classes of antibiotics;
- That greater focus be given to de-linkage mechanisms as effective means to combat r&d and access gaps, in addition to the current recommendations regarding international cooperation and new market models.

References

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