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**Programa de Pós-Graduação em Doenças Infecciosas e Parasitárias – PPGDIP/UFMS**

**PROVA DE LÍNGUA INGLESA – 22 de abril de 2019 (Edital N° 4 - PPGDIP/UFMS)**

**Número da INSCRIÇÃO:** \_\_\_\_\_

Considerando o artigo abaixo, publicado e adaptado do periódico *BMJ*, **responda em português as questões apresentadas após o texto.**

Yamey, G., Batson, A., Kilmarx, P. H., & Yotebieng, M. (2018). Funding innovation in neglected diseases. *BMJ*; 360: k1182. doi: <https://doi.org/10.1136/bmj.k1182>

1 Neglected diseases are those with insufficient markets to attract investment from  
2 the drug industry. They primarily affect populations living in low income countries and  
3 include malaria, tuberculosis, and diarrhoeal diseases.

4 Public and philanthropic funding is required to develop new health technologies to  
5 control these diseases. While funding from public-private partnerships helped to bring 37  
6 new treatments for neglected diseases to market between 2000 and 2011, this  
7 represented just 4% of all new therapeutic products registered during this period. As  
8 neglected diseases cause about 11% of the global burden of disease, there is clearly a  
9 “persistent insufficiency” in research and development (R&D). Except for a one-off  
10 injection of funding for Ebola and other African viral haemorrhagic fevers, funding for  
11 product development for neglected diseases has shown a downward trend since 2009.

12 How can this trend be reversed? Strategies to mobilise funding should engage  
13 governments from high, low, and middle income countries, philanthropic foundations, and  
14 the private sector. We propose five interconnected approaches.

15 Firstly, the public and philanthropic sectors should continue to expand successful  
16 incentive mechanisms and test new mechanisms to attract industry to participate in  
17 product development for neglected diseases. These incentives include long term  
18 partnerships that provide public investments in translational research and clinical  
19 infrastructure.

20 Secondly, funders could support a “health investors’ platform” to improve the  
21 targeting of limited resources. Poor coordination of investments is a key challenge in  
22 financing research for neglected diseases, especially in the private sector. A health  
23 investors’ platform would facilitate pooling and sharing of information on R&D needs,  
24 candidate products in the pipeline, estimated development costs and financing gaps, likely  
25 markets, and expected health and economic benefits. The platform could help to inform  
26 public, private, and philanthropic investors — and attract new investors — to fund those  
27 candidate products likely to have the largest public health benefits.

28 The World Health Organization’s new Global Observatory on Health Research and  
29 Development, though operating on a shoestring, is a promising first step towards building  
30 this kind of platform. World Health Organization (WHO) has a critical role in supporting  
31 R&D for neglected diseases, through convening experts, prioritising needs, and  
32 supporting countries to conduct health technology assessments. WHO member states  
33 need to increase their financial contributions to fully support this work.

34 A third approach is for international donors to work more closely with experts within  
35 low and middle income countries to tackle the documented mismatch between global and  
36 national research priorities. Developing a new framework for shared prioritisation would  
37 be a valuable step towards making R&D more “needs driven” and the resulting innovations  
38 more scalable. Regional institutions in these countries, such as the Africa Centres for  
39 Disease Control and Prevention, could help facilitate this coordination.

40 Fourthly, many low and middle income countries — such as Brazil, Cuba, India,  
41 Indonesia, and South Africa — are already funding research into neglected diseases, and  
42 a coordinated global effort is needed to encourage others to follow suit. In 2016, for  
43 example, India was the fourth and Brazil was the ninth largest funder of research into  
44 neglected disease globally. Governments and foundations could support the creation of  
45 an international “roadmap” for research — an analysis of the current capacities of all  
46 countries, the steps each country should take to increase its capacity, and the costs of  
47 such improvement. The roadmap would cover the entire life cycle from laboratory to  
48 implementation science and include indicators of progress.

49 This roadmap could help donors target their support for capacity building in low and  
50 middle income countries. It could also be a helpful tool for the new Coalition for African  
51 Research and Innovation, an alliance of African science leaders and international funders

52 that aims to build “a highly coordinated, well funded, and African led African innovation  
53 enterprise.” Other initiatives that could benefit from this roadmap are the Coalition for  
54 Epidemic Preparedness Innovations, which aims to develop new vaccines for epidemic  
55 control; the G20’s collaboration hub for antimicrobial R&D; the European and Developing  
56 Countries Clinical Trial Partnership, which has a major focus on building research capacity  
57 in Africa; and the US National Institutes of Health’s Fogarty International Center, which  
58 builds research capacity in lower income countries.

59 Finally, donors could help to unlock domestic resources for research in low and  
60 middle income countries, such as through a matching fund that pairs global and national  
61 resources for shared priorities. The movement towards universal health coverage  
62 provides the perfect window of opportunity for these countries’ governments to commit a  
63 percentage of domestic health budgets to R&D. Their governments must be in the driving  
64 seat in the development of affordable, scalable innovations that will help achieve universal  
65 health coverage. Engaging ministries across different sectors and studying the health and  
66 economic returns on domestic investment in research could help build political  
67 commitment.

68 Today’s health technologies are insufficient to end the death and suffering caused  
69 by neglected diseases. Concerted action on multiple fronts is required to mobilise funding  
70 to develop new treatments, to optimise its impact, and to put in place a sustainable  
71 pipeline of innovations for these important diseases.

1) De acordo com texto, defina o que são doenças negligenciadas e cite dois exemplos? (1,0 ponto)

Resposta: doenças negligenciadas são aquelas com mercados insuficientes para atrair investimentos da indústria farmacêutica. Exemplos: malária, tuberculose e doenças diarreicas.

2) Explique (ou exemplifique), de acordo com o texto, por que os recursos e investimentos em pesquisa e desenvolvimento na área das doenças negligenciadas têm sido claramente insuficientes ao longo dos últimos anos? (1,0 ponto)

Resposta: financiamento de parcerias público-privadas proporcionou 37 novos tratamentos para doenças negligenciadas entre 2000 e 2011, isso representou apenas 4% de todos os novos produtos terapêuticos registrados durante este período. Como as doenças negligenciadas causam cerca de 11% da carga global da doença, há claramente uma “insuficiência persistente” em pesquisa e desenvolvimento.

3) Resumidamente, como essa tendência de baixos investimentos em pesquisa e desenvolvimento na área das doenças negligenciadas pode ser revertida? (1,0 ponto)

Resposta: este cenário pode ser revertido com estratégias que mobilizem recursos e envolvem governos de países de desenvolvidos ou de alta renda, em parceria com países de baixa e média renda, fundações filantrópicas e o setor privado.

4) Como os setores público e filantrópico podem auxiliar no aumento e/ou estímulo de investimentos em pesquisa e desenvolvimento na área das doenças negligenciadas? (1,0 ponto)

Resposta: os setores público e filantrópico devem continuar a expandir mecanismos de incentivo bem-sucedidos e testar novos para atrair a indústria a participar do desenvolvimento de produtos para doenças negligenciadas. Esses incentivos incluem parcerias de longo prazo que fornecem investimentos públicos em pesquisa translacional e infraestrutura clínica.

5) Qual a finalidade e/ou função da “plataforma de investidores em saúde”, sugerida pelos autores? (1,0 ponto)

Resposta: melhorar o direcionamento de recursos limitados; facilitar o agrupamento e o compartilhamento de informações sobre necessidades de pesquisa e desenvolvimento na área das doenças negligenciadas; e informar investidores públicos, privados e filantrópicos – bem como atrair novos investidores – sobre o financiamento de pesquisas e desenvolvimento de novos produtos.

6) Qual organização tem papel fundamental na pesquisa e captação investimentos em pesquisa e desenvolvimento na área das doenças negligenciadas? Justifique sua resposta de acordo com texto (ou seja, explique porque tal organização desempenha este importante papel). (1,0 ponto)

Resposta: o novo Observatório Global de Pesquisa e Desenvolvimento em Saúde da Organização Mundial da Saúde. A Organização Mundial da Saúde tem um papel fundamental no apoio à pesquisa e desenvolvimento para doenças negligenciadas, por meio da convocação de especialistas, priorização de necessidades e apoio aos países para realizar avaliações de tecnologias em saúde.

7) Quais países citados no texto já possuem investimentos direcionados para pesquisa e desenvolvimento na área das doenças negligenciadas? (1,0 ponto)

Resposta: Brasil, Cuba, Índia, Indonésia e África do Sul.

8) Qual é o objetivo da *Coalition for Epidemic Preparedness Innovations*? (1,0 ponto)

Resposta: desenvolver novas vacinas para o controle de epidemias.

9) Por que a integração de ministérios em diferentes setores pode auxiliar na pesquisa e desenvolvimento na área das doenças negligenciadas? (1,0 ponto)

Resposta: poder auxiliar a construir um compromisso político.

10) Como você traduziria as expressões abaixo? (1,0 ponto)

- roadmap (linha 45): **roteiro**
- middle income countries (linha 35): **países de renda média**
- health technology assessments (linha 32): **avaliações de tecnologias de saúde**
- global burden of disease (linha 8): **carga global da doença**