



Federal Ministry  
of Education  
and Research



# Malaria, dengue fever, sleeping sickness & co.

Working together to combat neglected and poverty-related  
diseases



## Poverty encourages diseases

Around half of the world's population is considered as poor. Approximately three billion people have hardly any access to healthy or sufficient food, clean drinking water, medical care or education. All these factors encourage the spread of so-called "neglected and poverty-related diseases". In Germany these diseases can usually be cured or at least kept under control using modern drugs. However, they represent a great problem in those regions in the world that are afflicted by poverty. Many of the people affected have no access to medical treatment, drugs are often not available or not affordable. The consequences are devastating: More than a billion people suffer from neglected and poverty-related diseases and many millions of people die of these diseases every year.



“ We must combine our efforts world wide in order to make health an achievable goal for all. The German Federal Ministry for Education and Research (BMBF) funds research that helps to break the vicious circle of poverty and disease. Thus, we support the efforts of the G7, who have made "neglected and poverty-related diseases" one of their main topics. ”

Prof. Dr Johanna Wanka  
Federal Minister of Education and Research



## Tropical countries are particularly affected

Neglected, poverty-related diseases are almost always infectious diseases. They are caused by a wide range of different pathogens. Many of these diseases occur almost exclusively in tropical climate zones because their transmitters live there. Sand flies, for example, carry the pathogen causing leishmaniasis, tiger mosquitoes transmit the dengue fever virus and tsetse flies sleeping sickness. Mosquito nets are a simple protection against these diseases. But people in the affected regions often cannot even afford these.

Tuberculosis, malaria and HIV/Aids are also counted as poverty-related diseases. Research on these infectious

### Numbers, please!

- According to the World Health Organisation (WHO), more than one billion people world wide suffer from neglected and poverty-related diseases.
- In 2012 alone, 1.5 million people died of diarrhoea. Very often, the victims are children in developing countries. The causes: poor sanitary standards, limited access to clean water and lack of knowledge as regards of risks of infection.
- Thus, diarrhoea claimed as many victims in 2012 as HIV/AIDS

Source: WHO



diseases, which are also called the “Big Three”, is no longer neglected. However, their spread is clearly associated with poverty. Tuberculosis, for example, has almost been forgotten in Western Europe. Still, world wide, every year nine million people contract this infectious disease, and more than a million die as a result.

Furthermore, ordinary infections like diarrhoea or pneumonia claim millions of victims in poor resource settings. In particular, they are responsible for the high child mortality rates in developing countries.

Even though the pharmaceutical industry has stepped up its commitment in recent years, there is still little economic incentive to invest in the development of new drugs for neglected and poverty-related diseases. The reason is that people in the affected regions cannot usually afford expensive new drugs.

#### Neglected and poverty-related diseases: The list is long

- HIV/Aids, tuberculosis and malaria are by far the most common within the group of poverty-related diseases. This is why they are often referred to as the “Big Three”. But many other diseases caused by parasites, bacteria and viruses belong to this group as well.
- Examples are river blindness, sleeping sickness, and leprosis. The common feature: all these diseases pre-dominantly affect the poorest of the world.
- The term “neglected, poverty-related diseases” addresses diseases that mainly occur in developing countries. They often cause death or lifelong disablement.

## The strategy of the Federal Ministry of Education and Research

In the fight against neglected and poverty-related diseases, the industrial nations bear a particular responsibility for the promotion of research and development. The BMBF is facing up this responsibility on behalf of Germany. For several years now, it has been investing increasingly in research into neglected and poverty-related diseases,



based on a strategic funding concept. This will ultimately improve health care in poorer countries. Among other things, research funding aims to reduce child mortality and improve the health of mothers. Support for “Product Development Partnerships” is an important element. International non-profit organisations like the Drugs for Neglected Diseases initiative or the European Vaccine Initiative are committed to developing prevention measures, diagnostics or drugs. For example, a new vaccine against malaria, designed especially for pregnant women. The BMBF is also involved

in the European and Developing Countries Clinical Trials Partnership (EDCTP), a research initiative of the European Commission together with European and African partner countries.

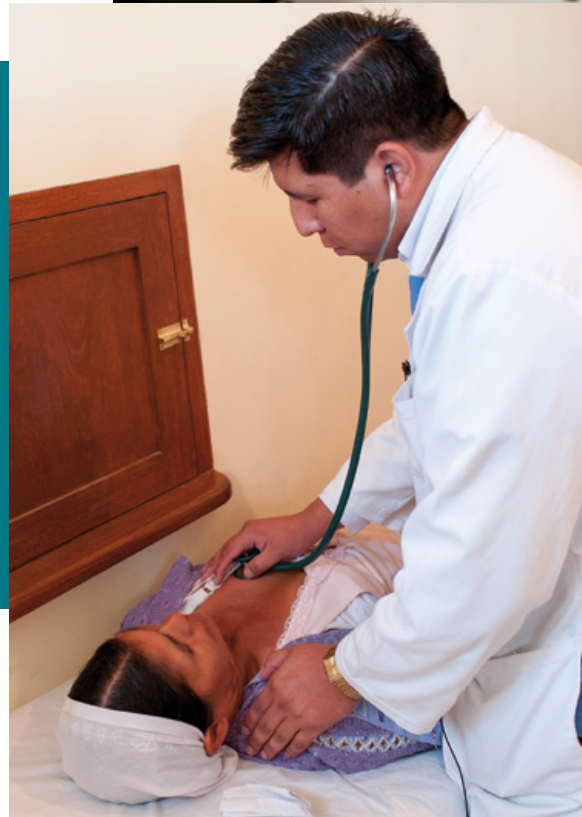


## Global cooperation – working together to achieve our goal

The international community has recognised that a concerted effort is necessary to sustainably and permanently improve the health of people in the poorest regions of the world. Therefore neglected and poverty-related diseases are a priority of the German G7 Presidency in 2015.

### Networking in the development of new medications: Product Development Partnerships

- Especially for neglected, poverty-related diseases, we need better treatment options – but research is expensive!
- Product Development Partnerships (PDPs) are international non-profit organisations. They coordinate joint activities of partners in science, industry, and civil society.
- Their main advantages: costs and risks are shared among many partners. And the resulting products are made available to patients at prices that are affordable even in the poorest countries.
- BMBF currently funds four PDPs.



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