Penyediaan Vaksin Mandiri Digagas

Penyakit infeksi tropis masih menjadi ancaman bagi Indonesia. Padahal, penyakit menular yang menimbulkan banyak korban dan memilikidampak kesehatan lanjut itu bisa dicegah, salah satunya dengan vaksin. Namun mayoritas penyakit tropis itu belum ada vaksinya. “Indonesia selalu kesulitan mengakses teknologi terbaru pembuatan vaksin,” kata Direktur Utama Bio Farma Iskandar di Jakarta, Selasa (19/8). Tak ada Negara sukarela mau membri teknologi pembuatan vaksin. Hal itu mengakibatkan Bio Farma, sebagai satu-satunya perusahaan dalam negeri pembuta vaksin, amat bergantung pada hasil riset Negara lain. Untuk itu, platform teknologi produksi vaksin harus dikuasai demi kedaulatan bangsa. Jika itu tak dilakukan, selamanya Indonesia akang menggantungkan kesehatan bangsanya kepada Negara lain. Terkait hal itu, pemerintah bersama perguruan tinggi, lembaga penelitian, dan industry menggagas Forum Riset Vaksin Nasional (FGRVN) ke-4n 2014. Sejak tahun 2011 kolabirasi riset vaksin nasional (FRVN) sejak 2011. Kolaborasi itu diharapkan mempercepat riset untuk memproduksi vaksin, tak perlu menunggu 15-20 tahun, dan menghasilkan vaksin yang sesuai dengan kondisi dan kebutuhan Indonesia. Dirjen Bina Kefarmasian dan Alat Kesehatan Kementerian Kesehatan Maura Linda Sitanggang berharap FRVN mampu menyinergikan para pemangku riset vaksin di Indonesia serta mengatasi lemahnya korrdinasi dan komunikasi antar-pelaku riset. Riset yang dilakukan harus mampu menghasilkan produk sehingga menumbuhkan industry kesehatan Indonesia. **Infeksi Tropis** Untuk penyakit infeksi tropis, FRVN memiliki konsossium pembutan vaksin tuberculosis baru dan dengue. Adapun riset vaksin malaria masih berupa kelompok kerja (*working groups*) akibat keterbatasan pendanaan. Peneliti Bio Farma, Neni Nurainy, Senin, mengatakan, vaksin TB baru dibutuhkan. Ini karena vaksin BCG yang diberikan kepada bayi hanya efektif mencegah TB hingga usia anak. Saat dewasa, kekebalan tubuh pada TB turun hingga perlu vaksi TB baru. Belum lagi, *Mycrobacterium Tuberculosis* yang menyebakan Tb memiliki galur beragam dan telah mengalami banyak perubahan. Untuk vaksin dengue, konsorsium saat ini baru dalam tahap awal penelitian guna mencari bahan baku vaksin. Pada 2010, Tb menjadi penyebab kematian terbanyak kedua di Indonesia, sedangkan malaria penyebab terbanyak ke-20. Sejauh ini, vaksin malaria paling sulit diteliti. Akibatnya belum ada vaksin malaria di dunia. Antigen parasit plasmodium penyebab malaria mudah berubah. Genom parasitnya pun mencapai belasan juta. “susunan asam amino untuk membuat vaksin amat banyak sehingga sulit menemukan mana yang terbaik untuk vaksin,” katanya. Meski sulit, Linda menegaskan, hal itu bukan berarti pemerintah tidak berupaya mencari vaksin malaria. Karena itu, pemerintah mendorong ilmuan agar bisa mengatasi masalah yang muncul dalam riset vaksin malaria. Staf ahli Menteri Riset dan Teknologi Bidang Keseahatan dan Obat L. Broto Sugeng kardono mengatakan, pemerintah focus meneliti obat anti malaria, bukan vaksin. Obat anti malaria buatan Lembaga Penyakit Tropis Universitas Airlangga yang berasal dari ekstrak batang cempedak diuji klinis. **Sumber: Kompas, 20 Agustus 2014**

Tropical infectious diseases are still a threat for Indonesia. In fact, the infectious disease that caused many casualties and have further health impact can be prevented, one of them with the vaccine. However, the majority of tropical diseases do not have the vaccine. "Indonesia has always been difficult to access the latest technology in making vaccines," said the President Director of Bio Farma, Iskandar in Jakarta, Tuesday (19/8). There is no country which willingly giving vaccine-making technology. It causes Bio Farma, as the only vaccine manufacturer company in the country, is highly dependent on the results of research in other countries. For that reason, the technology platform of vaccine production must be controlled for the sake of national sovereignty. If that is not done, Indonesia will depend its nation health to other Countries. Related to that, the government and the universities, research institutions, and industry initiated the 4th National Vaccine Research Forum (FGRVN) 2014. Since 2011, the national collaboration of national vaccine research (FRVN) has been conducted. The collaboration is expected to accelerate the research to produce a vaccine, it does not need to wait for 15-20 years, and produce the vaccine in accordance with the conditions

and needs of Indonesia. Directorate General of Pharmaceutical and Medical Devices of the Ministry of Health, Maura Linda Sitanggang hope that FRVN capable of synergizing stakeholders of vaccine research in Indonesia, as well as overcoming the weakness of coordination and communication among the research practitioner. The research conducted must be able to produce products so growing the health industry in Indonesia. **Tropical Infections** For tropical infectious diseases, FRVN have a new tuberculosis and dengue vaccine manufacturer. The malaria vaccine research is still a working group (working groups) due to the limited funding. Bio Farma Researcher, Neni Nurainy, Monday, said the new TB vaccine is needed. This is due to the BCG vaccine given to babies is only effective in preventing TB until the age of the child. As adults, immunity to TB dropped so it needs a new TB vaccine. Not to mention, mycrobacterium tuberculosis that cause TB has a diverse strains and have undergone many changes. For dengue vaccine, the consortium is currently in the early stages of research to find the vaccine raw materials. In 2010, TB became the second most common cause of death in Indonesia, while malaria is the 20th most common cause. So far, the malaria vaccine is the most difficult to research. Consequently there is no malaria vaccine in the world. Plasmodium parasite antigen that causes malaria is changing easily. Its parasite genome was reaching tens of millions. There are much "Amino acid composition to create a vaccine so that it is difficult to find which one is best for the vaccine," he said. Although it is difficult, Linda insists, it does not mean the government does not seek a malaria vaccine. Therefore, the government encourages the scientists to be able to solve problems that arise in malaria vaccine research. Expert staff of the Minister of Research and Technology of the Division of Drugs and Health, L. Broto Sugeng Kardono said the government focus on the anti-malaria drugs, not a vaccine. Anti-malarial drugs made in Institute of Tropical Disease of Airlangga University originating from the Cempedak bark extract clinically tested. **Source: Kompas, 20 August 2014**