Novartis: Working with DOH and other partners to end leprosy

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- In observance of Leprosy Control Week, Novartis is pleased to share updates on the various Novartis Foundation leprosy initiatives.

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Leprosy Control Week is celebrated in the Philippines every year on the last week of February to promote public awareness on the disease, its prevention, and treatment.

“Novartis is privileged to contribute in global efforts to end leprosy through the innovative leprosy initiatives the Novartis Foundation is undertaking together with our partners. We join the entire country in observing Leprosy Control Week to celebrate people who have experienced leprosy, raise awareness of the disease, and call for an end to leprosy-related stigma and discrimination,” said Mr. Joel Chong, Country President, Novartis Healthcare Philippines, Inc.

In observance of Leprosy Control Week Day, Novartis is pleased to share updates on the various Novartis Foundation leprosy initiatives:

Post-exposure prophylaxis: The Novartis Foundation worked with scientists, countries and patient groups to study post-exposure prophylaxis with single-dose rifampicin – an intervention today recommended in the WHO’s Guidelines for the Diagnosis, Treatment and Prevention of Leprosy.

Results published in 2020 in The LANCET Global Health from the largest ever research program on combining contact tracing with prophylactic treatment indicate this approach could massively reduce the global burden of leprosy. Use of post-exposure prophylaxis has indeed shown to reduce the risk of leprosy in contacts of leprosy patients by up to 60%.

The five-year Leprosy Post-Exposure Prophylaxis (LPEP) program traced 170,000 people who had been in contact with individuals newly diagnosed with leprosy, and treated 150,000 of them with a single dose of rifampicin to prevent disease.

If this approach is scaled up globally, near-elimination of leprosy could become a reality in a single generation.

AI4leprosy: An international team of scientists, led by Instituto Oswaldo Cruz (IOC/Fiocruz), Microsoft’s AI for Health team and the Novartis Foundation, has developed an AI-enabled diagnostic assistant that can help

identify suspected leprosy lesions. The tool, called AI4leprosy, works by assessing skin lesion images in combination with patient symptoms.

An article published in 2022 in The LANCET Regional Health – Americas shows that the diagnostic tool is over 90% accurate in detecting leprosy. This now serves as the basis for developing a mobile application to further validate the tool, and ultimately accelerate leprosy detection globally.

NTDeliver: Novartis is the sole supplier of MDT globally, but supply alone is not enough. Converting treatments into cures requires an effective supply chain to ensure medicines get to patients on time.

Currently, the supply chain for NTD medicines, including leprosy, is fragmented, involving many players, and requiring manual exchanges of data files. To address these inefficiencies, in 2022, Novartis joined NTDeliver, a cloud-based supply chain optimization and visibility platform now used in more than 100 countries to digitally track donated medicines for NTDs. This should substantially improve coordination across multiple stakeholders and ensure the timely and efficient supply of donated medicines for leprosy.

LEARNS: As part of the Department of Health-Novartis Task Force, the Novartis Foundation worked with the DOH and Department of Science and Technology to develop and implement the Leprosy Alert and Response Network System (LEARNS) – the Philippines' first mobile phone-based leprosy detection system.

During its pilot study in 2014, LEARNS allowed frontline healthcare providers to send images of suspect leprosy lesions and symptoms via SMS or via an app to a specialist, who could decide on further diagnostic actions to verify the diagnosis. LEARNS enabled community health workers with smartphones to send photographs of suspicious-looking skin lesions that can be the first symptoms of leprosy, and send these images to reference specialists. It was implemented in 29 provinces in 9 regions, with over 6,000 healthcare providers trained in the system, which allowed them to accelerate leprosy diagnosis significantly and to correctly identify 75 percent of suspect leprosy lesions.

“Through the National Leprosy Control Program (NLCP), the DOH works with other government agencies, local government units (LGUs), civil society groups and the private sector to ensure the provision of comprehensive, integrated quality leprosy services at all levels of healthcare in the country. Our shared goal is to achieve a leprosy-free Philippines,” said Dr. Razel Nikka M. Hao, Director IV, DOH Disease Prevention and Control Bureau.

“As part of the multisectoral Leprosy Task Force led by the DoH, the Novartis Foundation is a key partner in developing LEARNS, which was used in early case finding and helped reduce diagnostic and treatment delays,” said NLCP Manager Dr. Julie Mart C. Rubite.

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Contact Persons

Christine Fajardo

Corporate Affairs Head

Maribella Grace Sonsona

Communications Manager

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