

---

## Nigerian Doctor Invents Portable Low-Cost Ventilator



---

Nigerian doctor, [Dayo Olakulehin](#), has invented a cheap, portable, easily deployable, easy to use and rechargeable battery-powered ventilator, according to a report in Nigerian newspaper *The Guardian*.

The D-Box, just launched in Lagos, costs around 100 times less than a conventional ventilator at an introductory price of US\$300. Conventional ventilators cost around \$30,000 (about N9 million); low-cost alternatives still in development are to be sold for \$3,000.

Olakulehin, who trained at the College of Medicine University of Lagos (CMUL)/Lagos University Teaching Hospital (LUTH), explained that the D-Box requires little or no expertise to use and is powered by a rechargeable battery. D-Box is a joint venture product of the Canadian product development firm Inertia Engineering + Design, headed up by Ray Minato and LigandCorp, owned by Dr. Dayo Olakulehin.

The product was also publicly endorsed at the Lagos launch by officials from CMUL/LUTH; National Orthopaedic Hospital Igbobi, Lagos; Lagoon Hospital; and Inertia Engineering + Design, Canada. The joint venture is aiming to get the product into the hands of hospitals and medical centres in the next 16 months.

□

Olakulehin, Chief Executive Officer (CEO) and founder of [LigandCorp](#), explained that in resource-limited settings patients may miss out due to lack of intensive care beds and mechanical ventilators. Currently health workers may ventilate patients indefinitely by manually compressing a CPR bag.

“Generally, patients are ventilated manually via ‘pumping by hand’ – a process that is grossly inefficient because of the susceptibility to human error, costly in terms of manpower required to operate,” he said.

He was inspired to invent the device following the experience of being awakened by the father of a 5 year old child he was manually ventilating. The child had been put at risk of brain damage, and Olakulehin felt there had to be a better way.

Olakulehin emphasised that the device is not designed to replace existing ventilators which exist for critical intensive care - it is being introduced to improve the quality of care that is available for the patient. He added: “It is limited currently because it cannot be used for a child, unlike existing ventilators that have different modes, this is only Intermittent Positive Pressure Ventilation, IPPV, but we hope to improve it in the future.”

Sources: [The Guardian; Vanguard](#)

Published on : Tue, 19 Jan 2016