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Meet the man behind a billion nets, Mikkel Vestergaard Frandsen, founder and board member of Vestergaard. As we reflect on the journey to the billionth net milestone, it becomes evident that this moment is more than just a numerical achievement; it is an inflection point in our path to eradicating malaria.

In September 2023, at Vestergaard's high-level meeting around the United Nations General Assembly (UNGA), Mikkel shared his insights into the journey to the billionth PermaNet bed net and his aspirations for malaria elimination.



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When it comes to tackling malaria in endemic countries, unconventional approaches can often be the most effective. Breaking the mold and thinking outside the box have led to innovative solutions and new ways of addressing this critical global health issue.

The journey to a billion nets began with one step, in a bold and radical direction. But it took many steps, and many partners, to achieve the milestone.

When Mikkel Vestergaard Frandsen first joined his family-owned textile company in Denmark, it primarily made uniforms for hotel clerks and supermarket employees.

But Mikkel had a different vision – to grow a completely new business through "humanitarian entrepreneurship". Living and working in Nigeria from the age of 19, inspired a passion for Africa and a determination to apply the company's textile know-how to solve critical health issues facing the continent.

Some 30 years and a billion nets later, the company has transformed to focus solely on solving global health through innovative material science technology. Its three brands PermaNet, ZeroFly and LifeStraw – have collectively contributed to disease prevention for more than one billion of the world's most vulnerable groups.

One of the most vital innovations is the long-lasting insecticidal net (LLIN) credited with 68% of the averted malaria cases in Africa from 2000 – 2015, saving more than 11.7 million lives. Innovations in malaria prevention like the LLIN, have been game-changing in resource-limited settings, saving countless lives and improving health outcomes for those affected by this disease. These tools are a crucial part of the fight against malaria and are helping to make a real difference in communities around the world.

Today, Mikkel is well-recognised as one of the first humanitarian entrepreneurs, a global leader in public health, a philanthropist, an innovator, and a disruptor. Reflecting on the milestone, Mikkel explained:

"Malaria is utterly preventable. Because we have the technology, it is just a matter of will, to ensure that nobody dies.

"When I began building this business in 2000, 1.3 million people, mainly children, were dying yearly. Last year, that number was 627,000. Whilst the mortality rate has halved, too many people are still dying, and this is completely avoidable and totally unacceptable.

"So yes, a billion is a significant number, because it demonstrates what we can achieve if we work together. It is a milestone that deserves recognition of the pioneers, partners and champions who all have contributed to the fight against malaria and the most consequential public health campaign in the last 25 years. This achievement marks an inflection point, signifying a time of significant change in our efforts. I hope we see this as just a prologue to the great work that is still to come. The responsibility is for partners to carry the goal of elimination across the finish line."

"I saw an opportunity to leverage the existing delivery systems for childhood vaccinations every three years to scale up malaria prevention rapidly. The same children under five years of age were receiving vaccinations. They need insecticidal-treated nets too. Giving free bed nets to children and their caretakers when they attended measles campaigns achieved rapid, high, and equitable net coverage at low costs.

"These periodic campaigns are now the most common methods for providing bed nets to Africans, with more than 175 million PermaNet bed nets delivered over the past three years."

The role of partnership has been pivotal in the progress to beat malaria.



Innovations in malaria prevention like the LLIN, have been game-changing in resource-limited settings, saving countless lives and improving health outcomes for those affected by this disease.

Mikkel explained: "I never really believed the old saying 'to go fast, go alone, go far, go together' until I tried to go far alone! Then, I realised the value of what a partnership can achieve.

"The car cannot drive without the left rear wheel, but that wheel can't claim it's the only thing that makes the car drive. We are like one wheel in the fight against malaria – essential, but all the parts need to work together to be effective. I can't think of any other disease where the role of partnership has been so effective."

Mikkel regards Vestergaard's role as twofold – one, to deliver the right tools at scale, and second, to help drive collaboration and support our partners to be as effective as possible.

"Firstly, we want to deliver the most potent prevention technologies in response to the environmental and biological challenges we face. By providing the key intervention tool, we unlocked the ability to scale. Without that, we would have had small programmes that would achieve limited results. We provided one piece of the puzzle.

"Since our first PermaNet was recommended by the WHO, nearly two decades ago, we have consistently iterated the bed net to ensure it keeps up with the changing disease. Staying ahead of threats like insecticide resistance requires agility and perseverance."

Mikkel compares the intervention of the long-lasting insecticidal net (LLIN) with that of the role the bifurcated needle played in smallpox eradication in the 1960s – the needle innovation provided the vital tool, that enabled the partnership of WHO, USAID and other actors. to implement at scale.

"There are parallels with the smallpox case. Progress in malaria happened because of the advance in bed net technology, combined with 'the rise of the mega-donor' exemplified by the Roll Back Malaria Partnership (now known as RBM Partnership to End Malaria), which enabled this tool to be executed at scale and make an impact. Until that point, we were losing the battle. There simply wasn't the infrastructure where it was needed to implement re-treatment of nets. The long-lasting net altered the odds in our favour."

"Many partners have come and gone, and different groups have shown leadership at different times. But for 25 years, we have been a constant enabler, and that's a responsibility we take seriously." In January 2020, Mikkel transitioned from the day-to-day leadership of his public health company but continues to steer the ship from his position on the Board. "I have been lucky to find capable and eager leadership in Amar Ali our new CEO, who shares my values and vision that "doing good, is good business."

Throughout his career, Mikkel has started and grown multiple material science companies whose mission is to benefit humanity. In addition to founding Vestergaard, Mikkel also founded LifeStraw and serves as CEO of Sceye.

LifeStraw manufactures a line of water filters that have helped to nearly eradicate Guinea worm disease, enabling over 55 million people to receive clean drinking water.

Sceye is a material science company that builds and operates the world's most advanced, high-altitude platforms, capable of delivering super-fast internet directly to devices and high-resolution imagery of the Earth in real-time.



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"The malaria community is a "big tent", our industry is constantly changing. You never know who the next big player in the field will be, that drives us faster. So, we must keep our minds open to future solutions and never lessen our resolve. For our part, we will continue to respond with the most potent and effective technology, innovating and scaling up new generations of bed nets to combat the evolution of the parasite that causes the disease."

"Two weeks ago, LLIN number 1 billion rolled off our production line, and while this is cause for celebration, it is also a time to reflect on the inflection points that made the fight against malaria one of, if not the most consequential public health campaign in the last 25 years.

"It is a milestone that deserves the recognition of the pioneers, partners and champions who caused these very significant inflection points... Whether that was the development and scaling of the LLIN, which took repeat intervention out of bed net distribution, or the merging of child health programmes which led to the adoption of universal access policies, or the rise of mega-donors, or the highly goal-oriented advocacy and partnership. My appreciation is immense for the role you have played throughout this incredibly impactful journey.

"It is unquestionable that the fight against malaria wouldn't have been nearly as effective without our many, many, valued partners."