

Meet Dr. Karsten Paust

Dr. Karsten Paust, an international ophthalmologist practicing in Bonn, Germany, was forever changed by his trip to the most western parts of Tanzania in 2016. Stunned to find such a lack of eye care for the population, he could not fathom how there could be such a considerable amount of blind people without health care and such a lack of equipment available in the state hospitals. Dr. Paust shared with KnowTheGlow his frustration stating that when he came home and could not find any answers as to the how there could be such a lack of progress over the past 20 years, he started a new project, a Prevention of Avoidable Blindness Program called TanZanEye, cooperating with other programs and groups, like The Arclight Project, Charity vision and Else-Kröner-Fresenius Foundation. Dr. Paust explained how they focus on preventing blindness across all ages because if a child becomes blind, it is an issue for the whole family to care for that child. If a parent becomes blind, it is a challenge for the whole family in a different way. Dr. Paust is passionate about his commitment to building a sustainable eye care system that, at the 10-year mark of the project, he hopes will be able to run itself. He is pleased with the project's success thus far and is determined to give it the time it needs to thrive and become self-sufficient.

Traveling to Tanzania twice each year, Dr. Paust and his team work to run eye camps, provide eye examinations, and facilitate treatment procedures (predominantly cataract surgeries). Still, he also works tirelessly on training to build up local human capacity. At these eye camps, ophthalmic assistants ("eye nurses") help the local assistant medical officers (non-physician cataract surgeons) as well as the sole ophthalmologist (the first in the area!) with screenings and refractions. In two weeks' time, they can see as many as 700 patients and perform surgery on over 200 eyes. Dr. Paust and his team's most critical work focuses on training so that local healthcare workers can learn new procedures and also build trust with their reluctant community residents who often distrust modern medicine. If you train people properly, they can return to their primary care unit and start making a difference as long as you've worked to ensure they have the necessary equipment to examine and treat the patients they see. Even with just three months of training in eye health, an ophthalmic nurse can begin treating trachoma. Dr. Paust stresses the importance of continuing the movement, complete with trained optometrists. Last November, Dr. Andrew Blaikie (<https://knowtheglow.org/dr-andrew-blaikie/>) accompanied Dr. Paust to train the eye care workers and community health care workers to provide vision screening using the Arclight scope. This training was done in person as well as remotely with Dr. Martin Anderson, a colleague of Dr. Blaikie who is streaming a presentation online from Edinburgh. There are several factors to consider when going into an LMIC when training health care workers. In this case, Dr. Paust was mystified as to how an ophthalmic assistant learned in Tanzania when they did not seem to have any written materials. Alongside Martin, Karsten wrote an ebook for eye healthcare workers in Sub Saharan Africa, providing text, photos, and videos. This has proven to be a vital tool when training ophthalmic assistants.

Today, TanZanEye has two clinics (one in Sumbawanga and the other in Mpanda) serving three regions in Tanzania with over 60 ophthalmic assistants, four assistant medical officers – cataract surgeons, and one ophthalmologist. Even this incredible progress is still

insufficient to reach the families in the far-reaching corners of the region. Therefore, Dr. Paust and Dr. Blaikie decided that some of the ophthalmic assistants who have completed their training should now train community health workers on how to use the ArcLight to screen. They see mainly children in the school, specifically looking for conjunctivitis, cataracts, retinoblastoma, and anything else that looks abnormal. At the primary clinics, Dr. Paust explains that they are all trained and can provide the same work on the same level. He can give a second opinion when he comes to town, but he is not the primary line of care. He wants the locals to go to their doctors and stresses that this is the most significant element of sustainability – having the eye care workers performing their work.

Dr. Paust lamented to Megan that while much progress has been made, there is still a considerable need to build up this field. He sees that they have a path to success thanks to the cooperation of the University of St. Andrew's and Else-Kröner- Fresenius Foundation, along with advocacy groups like KTG standing behind him and TanZanEye. If he can send nurses to the periphery of the region to educate mothers and families about eye health in their children, it will be another massive step in the right direction toward helping one of the poorest areas in the region see a brighter world.

KTG looks forward to highlighting the incredible progress and work Dr. Paust and his team are continuing to achieve in Tanzania through the TanzaEye Project.

(For more information on the TanZanEye Project, go to <https://www.tanzaneye.de>)

