EXPERIENCES FROM THE FIELD

NEW APPROACHES TO NCD MANAGEMENT IN TANZANIA

Working effectively in a resource-limited setting requires a deep understanding of that setting, and the ability to act in ways that are best suited to it. This is especially true when it comes to developing health strategies and innovations in such areas. CUAMM's work on managing NCD treatments in Tanzania highlights the importance of knowing how to adapt interventions to specific socioeconomic contexts.

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ADDRESSING HYPERTENSION AND DIABETES

In July 2024, I was given the opportunity to stay for a couple of weeks at the Tosamaganga Hospital guesthouse while studying noncommunicable diseases (NCDs) in this rural area of Tanzania. These conditions are increasingly prevalent in sub-Saharan Africa, especially in urban areas, due primarily to the pervasiveness of Western lifestyle habits such as smoking and the consumption of sugary drinks and processed foods high in sodium and fat. The high prevalence of hypertension and diabetes mellitus – which affect one in three and one in ten adults, respectively – is therefore not surprising.

NCDs are also prevalent in Tosamaganga, exacerbating the economic challenges faced by its residents. Only 25% of the patients in this region, in fact, have health insurance; the other 75% must pay out of pocket for medical appointments and tests. This can become a very costly burden, especially when it comes to NCDs. Thanks in part to CUAMM's support and other donations, in Tosamaganga screening and treatment are provided free of charge to those in need.

TOSAMAGANGA AND CUAMM'S INTERVENTION: THE NUMBERS

A screening and treatment program for hypertension and diabetes mellitus has been up and running at the Tosamaganga hospital since 2019. Analysis of the data collected since then shows that one-third of the 2,038 patients with hypertension had very high blood pressure levels, while the same percentage of the 687 patients with diabetes mellitus had very high fasting blood sugar levels. In sub-Saharan countries, there is as yet little awareness – both among health policymakers and citizens – of the gravity and consequences of these diseases, which many perceive as "new".

Given the challenging combination of high numbers of patients with NCDs and extremely limited human and material resources, CUAMM's intervention is aimed at implementing and demonstrating the feasibility and sustainability of a primary care model by training and supporting health policy decision makers, health workers and patients themselves in the prevention and treatment of these "new" diseases. Our organization is fully committed to this end, including the provision of resources. The project is coordinated by an Italian doctor, and medicines and diagnostic tests are provided to anyone who needs them and does not have health insurance.

Three years into the intervention, we are seeing encouraging results: the percentage of hypertensive patients whose blood pressure has been brought within the recommended range has risen from 13.0% to 53.2%, while the percentage of diabetics who have achieved target blood glucose levels has increased from 19.0% to 43.6%. This outcome only underlines how much work remains to ensure the continuity of this care in limited-resource settings like that of Tosamaganga.

CREATIVE TREATMENT AND PREVENTION STRATEGIES

Clinical experience, a motivation to work together with local doctors, and a certain amount of creativity: in low-resource settings, all of these are useful for identifying innovative and sustainable solutions for the future.

For example, we are now testing a simplified protocol for our diabetic patients, including twice-daily administrations of pre-mixed insulin, visit-by-visit patient education on how to independently use glucometers and blood glucose test strips, and guidance on regulating food intake. And as a first step in the treatment of hypertension, we are testing the use of Nifedipine, an inexpensive, easy-to-use drug that is far more effective than Bendroflumethiazide, an old diuretic still used in Tanzania.

Finally, we are experimenting with the use of Absolute Cardiovascular Risk Charts to estimate the risk of cardiovascular disease, using Body Mass Index (BMI) instead of LDL cholesterol, which is an uncommon and costly laboratory test in this setting. Such experiments, aimed at finding frugal and sustainable, yet effective and scientifically-based techniques, have already been conducted in the USA and South Africa.

Working in Africa spurs us not only to be creative, but also to determine what the *true* primary health needs of a given population (including Italy's own) are, and how public healthcare systems can best meet them.