



Advance Access & Delivery

AA&D Chennai Project Intern

Understanding the impact of perceived quality and perceived reliability of blood sugar test on service uptake in community health centres in Chennai, India

Organizational Overview

Advance Access & Delivery was founded in 2015 to address barriers to high quality healthcare in solidarity with economically and socially marginalized groups. AA&D serves the Secretariat of the Zero TB Initiative (ZTBI), a global coalition of public and private stakeholders, health care providers, civil society groups, and policy makers to implement comprehensive strategies to eliminate tuberculosis (TB), the world's deadliest infectious killer of adults that killed 1.4 million people in 2019. AA&D has active projects in six countries globally and has offices in the United States and South Africa and its founding board members hold academic appointments at Harvard Medical School and Duke University's Sanford School of Public Policy. AA&D's leadership has extensive research, clinical, and implementation experience in Peru, Lesotho, South Africa, Mexico, India, and Russia working alongside civil society and public sector partners to design and implement programmes that deliver treatment and support to vulnerable communities in low resource settings. From supporting the treatment of tuberculosis globally (a disease which remains the number one infectious killer of adults despite having a cure since 1948), to pioneering models for community-based diagnosis of diabetes in South Africa and India, to co-running Durban South Africa's first harm reduction centre, AA&D is making investments in designing models of care that recognize the importance of linking the public and private sectors, that optimize treatment outcomes, and that recognize health as a human right.

Overview of AA&D's work in Chennai, India

The city of Chennai in Tamil Nadu State, Republic of India, is working towards an ambitious global health program focused on screening and access to care for tuberculosis, known as "TB Free Chennai Initiative". The approach is bringing stakeholders from public and private, health and non-health sectors together to think of new ways to eliminate TB as a major public health threat in the mega-city.

AA&D is working together with REACH, a Chennai-based non-profit to support a comprehensive diabetes and hypertension screening and treatment program in Chennai that builds upon the related community-based health work of TB Free Chennai and the significant resources of private providers in Chennai.

By implementing an innovative screening and treatment algorithm designed specifically for the particular setting, and working with government officials to remove blockages to care for the first several hundred TB positive and TB negative diabetes patients, the project is able to link patients to the care they need on an accelerated timeline while informing city-wide programmatic scale-up. Due to its proximity to policy makers and key in-country researchers, this project is helping to provide relevant and compelling program data that is shared with programme partners, affiliated organizations, and government agencies.

Brief overview of NCD situation and the move towards HbA1c

Based on the TB prevalence study, Chennai has an estimated 16,000 people with active TB of whom 50% are estimated to be in the private sector. India is home to the second largest number of adults



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living with diabetes worldwide (after China), with an estimated 69 million cases in 2015. The prevalence of diabetes has been steadily increasing in the past few decades (especially in Tamil Nadu with 10% raw prevalence), as seen in a study by the Indian Council of Medical Research, which predicted 101 million cases of diabetes in India by 2030. The city of Chennai has one of the highest incidences of diabetes, which affects 23% of the city's population over the age of 20¹; and a recent study has shown that hypertension is present in about 20% of the population over the age of 20². A recent study done in Chennai showed a high prevalence of glycaemic disorders in South Indian patients with pulmonary TB and unexpected heterogeneity within the patient population with diabetes and TB.³

Building on ongoing assessments to understand the gaps in care for diabetes patients, and to improve the quality of care for people with this disease, the team began to pilot a point of care HbA1c diagnostic tool to evaluate TB patients, TB presumptives, and TB contacts for diabetes using a test that would look at their average blood sugar across a three month period. This decision was informed by two observations 1) the high prevalence of previous diabetes diagnosis prior to receiving services from our program start, and 2) the prevalence of uncontrolled blood sugar among the program's target population, including people who were previously diagnosed with diabetes and are receiving treatment for their disease. Additionally, this decision was informed by the progress made by AA&D's programme in Durban, South Africa, which recently began piloting handheld HbA1c testing among community members in Umlazi, a township where the project has been operating since 2018.

HbA1c testing in Chennai is being provided free of cost to patients at 21 Nakshatra centers and in four private laboratories. These locations were selected based on their ability to handle high throughputs of patient referrals.

The Opportunity:

Since point of care HbA1c tests were introduced to the programme at the end of 2020, there has been an increase in the number of people receiving the test as compared with the random blood glucose test that was previously offered. These efforts aim to answer the question: "Does a more sensitive diagnostic tool lead to increased enrollment or treatment acceptance among patients and providers, and does this change the quality of care that they receive?"

First, the intern would assist AA&D and its partner, REACH, in creating a qualitative research instrument to determine the impact of perceived quality or reliability of a blood test (comparing the random blood sugar test with a HbA1c) on uptake of services at community centres.

This instrument will be used by the local REACH team to conduct interviews both with private providers and individual patients accessing services from the Nakshatra centres to determine if there is a link between perceived quality or reliability of a test and the number of people coming into a facility to get a test, their access to necessary care, and their health outcomes. The intern would

¹ Mohan D, "High burden of prediabetes and diabetes in three large cities in South Asia: The Center for Cardio-metabolic Risk Reduction in South Asia (CARRS) Study"

² Mohan V, "Prevalence, awareness and control of hypertension in Chennai--The Chennai Urban Rural Epidemiology Study (CURES-52)"

³ Viswanathan, "Prevalence of Diabetes and Pre-Diabetes and Associated Risk Factors among Tuberculosis Patients in India" (2012)



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assist the AA&D and REACH team in developing the instrument and the research methods for using the instrument to collect data.

Second, the intern would document what the centres have done to date to create awareness of the test and would document the information that is readily available about HbA1c versus Random Blood Test both at the community level and at the facility. To collect this information, the intern would work closely with the REACH team to understand what information is publicly available as well as what information they have provided to the general public or at the facilities that may have impacted the public's understanding or acceptance of one test as compared with another. This documentation would be submitted to AA&D and REACH in a short report by the end of the project period.

Third, the intern would contribute to the data entry, management, and analysis as outlined in the methods developed in collaboration with the REACH team. In this process, the intern will seek to derive meaningful lessons from the qualitative and/or quantitative data collected, with implications for program growth both for the Chennai-based team and potentially for AA&D's wider partnership network. The intern may have the opportunity to present or report these results in a variety of formats such as through webinars or poster presentations.

The Intern will report to AA&D's Co-Founder, Michael Wilson and will work closely with AA&D staff members both who are working remotely and those in the Durham, NC office.

This position is anticipated to start in May 24 2021 and last for 8-10 weeks depending on the arrangement between the intern and AA&D. The Associate is expected to work 20 hours per week, with the possibility of altering these hours as agreed upon. AA&D will pay a rate of \$15 USD/hour for this internship.

Contingent on mutual interest and funding availability, this position may be extended and responsibilities may be adjusted based on program needs and Intern's academic or professional interests.

Requirements:

- Commitment to social justice and the highest standard of health for all.
- Honesty and integrity in the workplace, and a strong commitment to collaboration and collegiality
- Excellent writing and communication skills
- Experience in qualitative research methods, particularly survey development and qualitative data analysis
- Exhibits critical thinking and creative problem-solving.
- Ability to work well and maintain professional relationships and a humble attitude with a diverse team and set of partners in both domestic and international settings
- Ability to work in teams and independently

Interested candidates must submit a letter of intent together with a CV to Michael Wilson, MichaelW@aadglobal.org by 5 April. A short interview will be conducted by two AA&D team members with interested candidates.