

educated our local team on how to utilize the SOP and monitoring protocol and have seen great success with this to date. We have been able to monitor patients' adherence to the medication and have observed positive clinical results.

Going Forward: With the success in our pilot clinic, we hope to continue to expand the use of hydroxyurea to additional clinics in Angola, which will impact and improve the quality of life of more patients living with SDC in Angola.

Funding: This project was funded by Chevron and the medication was donated by AmeriCares in partnership with Bristol-Meyers Squibb.

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Mobile health innovations for low-resource settings: Experiences from a mental health community screening project in rural India

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Project Purpose: This presentation shares Medic Mobile's (MM) experiences from an innovative mHealth project with community mental health workers (CMHWs) in partnership with the MINDS Foundation in India.

Low and middle-income countries (LMICs) bear over 75% of the global burden of mental illness (WHO). In India, there are nearly 70 million mental illness patients (NIMHANS). Limited government spending has resulted in a severe shortage of mental health facilities, particularly in rural areas, and a deep-seated stigma towards mental illness further hinders patients from seeking and accessing care.

Method: MM and MINDS launched a pilot in December 2014 to conduct community mental health screening in rural Gujarat. MM's SIM application allows users to collect data through custom forms on any mobile phone. For this pilot, the SIM application was designed as a mental health assessment tool, allowing CMHWs to identify suspect patients and refer them to hospitals for treatment. During the pilot, several important lessons emerged:

The challenges associated with mental illness are different from other diseases. Adopting a human-centered design approach allowed us to understand the stigma associated with the illness in rural India, and the needs of our end users - CMHWs who handle sensitive cases with utmost discretion.

Mental health survey design requires careful analysis, particularly given the social stigma. MINDS designed a survey to fit the sensitive cultural context of rural India, and MM ensured that it was technology-friendly.

Training is important for the adoption of any new technology, particularly for users with low technology literacy. Our training focused on teaching CMHWs the basic uses of a mobile phone and its specific use in a mental health context.

Outcome & Evaluation: Between December 2014 and June 2015, 1,300 individuals were surveyed across 8 villages in Gujarat. Of these, 287 individuals were identified as suspect patients suffering from mental, neurological or substance use disorders, and were referred to hospitals for treatment.

Going Forward: Well-designed mHealth tools have tremendous potential to strengthen care coordination for mental illness, particularly in LMICs, and should be further leveraged by practitioners and researchers to address the challenges of mental healthcare.

References:

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2. National Institute of Mental Health and Neuro Sciences (NIMHANS), National Human Rights Commission. Mental Health Care and Human Rights. New Delhi: NIMHANS, 2008.

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Proposal for a consortium to study anti-cancer properties of west African medicinal herbs

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Program/Project Purpose: Traditional herbal medicines are widely used in West Africa for a large range of disease conditions, including cancer. However, there is little information about their therapeutic efficacy and active constituents. Many academic centers in Nigeria and elsewhere in West Africa are interested in studying the biological activity of these medicinal herbs, but their technological and human resources are limited and compromised by electrical power problems. We are in the process of developing a consortium of academic centers in Nigeria joining forces with the University of Illinois at Chicago (UIC) to more effectively study the anti-cancer activity of Nigerian traditional medical herbs.

Structure/Method/Design: Four sites in the South of Nigeria have joined forces to develop this consortium covering the southwest (University of Lagos), and three different sites in the southeast (Universities of Uyo, Calabar, and Nsukka). Medicinal plants specific for each area will be selected on the basis of their use in cancer patients and collected to produce extracts locally. These extracts will be sent to UIC for high-throughput analysis of their anti-proliferative and pro-apoptotic effects on human cell lines representing four major West African malignancies, cancers of the breast, prostate, liver, and uterine cervix. Once activity has been detected, these extracts will be fractionated in Nigeria and these will be sent to UIC to identify those fractions that contain the major activity.

Outcome & Evaluation: The major objective of this effort is identification of medicinal herbs with potential in vivo anti-cancer activity for further study in animal models and human trials. Importantly, possible adverse effects (stimulation of proliferation or inhibition of apoptosis) will be assessed as well to rule out potential negative implications of use of these herbs in cancer patients.