

# A Web Based Mobile Healthcare System that Aims to Reduce Under 5 Child Mortality Rate (U5CM) and Maternal Deaths in Kenya: A Case Study Dadaab Refugee Camp

Sayee Srinivasan, Supraja (School: Shree Cutchi Leva Patel Samaj School)

Dhokiya, Kunjal (School: Shree Cutchi Leva Patel Samaj School)

According to UNICEF, Kenya has a very high prevalence of child mortality rate which is approximately 49/1000 live births. In 2017 Kenya had an estimated 502,860 children who had missed the required vaccinations leaving them vulnerable to preventable diseases. Another factor that has fueled child mortality is malnourishment. It has stunted 482,882 children's growth in Kenya (UNICEF, Kenya 2017). Maternal deaths are identified as one of the rising concerns because maternal mortality rate in 2017 was 448/100,000 live births. (Daily Nation,2017). This project aims to develop an innovative strategy designed to reduce child mortality and maternal deaths in Kenya by using a web based mobile healthcare system. We aim to develop a system that will help in monitoring and ensuring that required medical assistance and immunization is provided to children and pregnant women through the use of GPS trackers as wrist bands for pregnant women and pendants for children. The system also monitors nourishment levels of children based on their BMI and advises on diet plans with the locally available food items through the use of DBMS (for undernourished). It also maintains a central database where all the medical information of these registered pregnant women and children such as diseases are managed. This will enable epidemiologists to study incidences, distribution of diseases and other health related factors. The use of the system shall assist in tracking and ensuring administration of medical services to pregnant women and children. It will also help the government in decision making and public policy formulation.

## Awards Won:

Third Award of \$1,000