# Mobile Medical Information for the Deaf

Deaf with a capital letter D refers to people whose first language is sign language and who are members of a specific linguistic cultural group. The language barrier when trying to communicate with the Deaf person can be frustrating for both parties but may have serious consequences during an emergency, for example when a Deaf person must be warned about a possible dangerous situation. The Deaf community whose language is Sign language faces the same barriers when accessing health information as English second language user’s in the world. This paper focuses on a system that will help Deaf people gain access to illness information.

Studies have found that Deaf individuals lack access to illness information due to problems in communication, low literacy and tightly woven social networks within the Deaf community. It was also found that Deaf pupils who receive their schooling through the medium of a spoken language and have been taught to lip read spend their time at school developing their lip reading and speech skills often at the cost of their general educational development (including the development of their reading and writing skills), which translates into low literacy levels .When a person lacks access to information it impacts on the person’s ability to learn thus many Deaf people are being kept from being successful in their communities because they do not have easy access to information.

A mobile application is developed to improve the health care services for Deaf patients. This application will be piloted to provide information on Human Immunodeficiency Virus, Acquired Immune Deficiency Syndrome and hypertension the information that will help Deaf people have more information on these illnesses. The information will be recorded and will then be translated into sign language using video footage. The multi-media information will be stored in a database. This system could help Deaf people to gain more knowledge about these illnesses.

Literature review and interviews were used to gather the user’s requirements; in the interview the participants were given a questionnaire to help understand if there was a need for an application that will help Deaf people gain access to illness information

The application will only work on Android devices, it is developed using eclipse IDE for java developers, android tools (android SDK), java development kit (JDK) and Java Runtime Environment (JRE).

Usability testing and functionality testing were conducted to determine the extent an applications interface facilitates a user’s ability to complete routine task. The medical information application was tested with hearing users to evaluate how they react to the application and whether or not the application will be useful to Deaf users.

We received positive feedback from the participants that they think the application might be useful to the Deaf users as they lack access to illness information, the application has almost all the answers that might help a Deaf person gain more knowledge to illness information in Sign language.