

Abstract

Introduction

Transplantation has become a widespread practice globally. Transplant coordinators in Sri Lanka are medical officers who coordinate transplant activities from both live and deceased donors. Therefore, they need to assess the donor condition several times and also communicate with several specialities. Since mobile phone applications are used widely Sri Lanka for health practice a mobile application prototype was designed for android devices to facilitate the deceased donor organ transplantation procedure.

Methodology

All the donor coordinators within the country were interviewed they were all initially given a requirement analysis questionnaire. Following the analysis of requirements, the first version of the mobile application prototype was developed. A mobile application prototype version one was designed for android devices to facilitate the deceased donor organ transplantation coordination. This prototype consists of guides and simple algorithms to facilitate the deceased donor organ transplantation process. The prototype was designed using the Justinmind prototyping tool. The usability of the prototype was assessed by the participant following its visualization. The second version of the prototype was developed following the evaluation.

Results

96% of the institutional transplant coordinators were aware of their duties and 91% were aware of the procedures to be followed. A similar number (96%) have correctly emphasised on the importance of comprehensive documentation of the transplant surgeries and the outcome. They were in favour of maintaining good communication with a national transplant coordination centre. In the current context of Sri Lanka, the newly established National Transplant Coordination Centre and regional donor coordinator centres as well as national transplant centres are not connected by a centralised network, but the coordinators attitude towards maintain communication with the National Transplant Centre assures that once centralised network is established the continuity will be maintained.

During the post evaluation the coordinators agreed that the mobile application would help increase the efficiency of the coordination process (80%). The likelihood of the coordinators using the mobile application was 96%, and all the coordinators preferred deceased donor coordination using the mobile application. It was also indicated by the coordinators that the application was easy to use and that it will help change the way the deceased donor transplantation be conducted.

Conclusion

A mobile application for the coordination of the deceased donor organ transplantation activities have shown to be beneficial, it could also help solve the difficulties that arise due to the lack timeliness of information. Also, the institute transplant coordinators are ready to accept a mobile application.