Possibility of Telemedicine Using Mobile Van Clinic and Virtual Conference

Jitsuzo Katsumata  Tetsuya Toma  Tetsuro Ogi

Graduate School of System Design and Management
Keio University, Yokohama, Japan

Introduction
Rural clinics in developing countries have problems of insufficient medical equipments, doctors and nurses, while quality level of urban general hospitals is similar to that of advanced countries. In case of local villages, a gap between urban and rural areas is opening. This paper describes the proposal of telemedicine system and mobile van clinic and virtual conference from the viewpoint of medical quality improvement.

Aim and Objective
The purpose of our research is to assist rural hospitals with the same quality of clinic performance as that of urban general hospitals. This research covers from the introduction of the telemedicine system and mobile van clinic and virtual conference and explores a possibility of quality improvement measures in the healthcare at the rural villages.

Material & Methods
For rationale and methodology, we simulated van clinic using an automobile which acts as a regional state hospital equipped with medical apparatus. From a medical staff point of view, this will help local people who are beneficiaries, and it reduces time required for people to receive medical service and help improve medical service, after we analyzed the factors which affect willingness to pay (WTP) for medical services.

Results and Conclusion
In conclusion, this system can be promising as the healthcare service quality in rural villages should be improved. We confirmed the effectiveness of the mobile van clinic system in which virtual conference including diagnostic imaging is provided through the clinics in rural villages that are equipped with telecommunication facility connected to urban hospitals.