

Introduce the Mobile Health Check Car using POCT devices in Japan

Hideo Sakamoto¹, Kiyomi Hata¹, Kenichiro Mitsunari², Masafumi Matsuda¹, Akiko Gotoh², Michiyo Kamada¹, Shion Imoto¹, Mie Iwakoshi¹, Motoko Kozuki², Masato Omori², Ikuyo Sugiyama¹, Kunihiko Takamatsu¹, Yuka Taniguchi¹, Rie Ueno¹, Akiko Imanishi¹ and Kunihiro Ueda¹.

1) Faculty of Health Science, 2) Faculty of Education, Kobe Tokiwa University 2-6-2 Otani, Nagata, Kobe, Hyogo 653-0838, Japan

Introduction: It is important to maintain health condition for spending better life and to know the behavior for disaster such as earthquake. From this point, we introduced the Mobile Health Check (MHC) Car name of “OGENKI DECAR” in Japanese, which is compact vehicle equipped with Point-of-Care Testing (POCT) devices and some of self-health check devices. POCT devices have an advantage for use outside the hospital because of their portability. In fact, POCT devices were useful medical support equipment at the Great East Japan Earthquake, as I presented CPOCT 2012 International Symposium at the Prague. The purpose of to introduce the MHC car is not only health check in daily life but also to enlightenment of response to disaster.

Method: We recruited healthy volunteers with the signature of consent form to demonstrate the MHC car. While the medical technologist performs the laboratory tests using the POCT devices, the nurse is able to focus on assessment and care using the real time test results. The whole blood sample was analyzed for AST, ALT, gamma GTP, total cholesterol, triglyceride, glucose and albumin levels using the POCT device by the medical technologist. Also volunteers are able to check themselves for blood pressure, BMI, pulse wave and hemoglobin by self-health check devices. The medical technologist explained the meaning of each laboratory test. The Nursing staff also conducted informative talks regarding general healthy lifestyles without giving any individual diagnostic information. We also submitted questionnaires to the volunteers for their impression of our system and to obtain information for making educational material how to correspond to disaster.

Conclusions: Our demonstration indicates that MHC car will be able to contribute for health care especially for people who live in inaccessible areas or do not have way of transportation, as the benefit of MHC car is mobility and ease of access in Japan. Also MHC car will be able to act as emergency laboratory medicine function for disaster affected area support.

Acknowledgement: This project was supported by Japan MEXT program for Strategic Research Foundation at Private Universities, 2013–2015.