

Disaster information sharing of welfare service workers based on knowledge from experience in a tsunami disaster area

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In Great East Japan Earthquake occurred on March 11, 2011, welfare service facilities suffered great damage. Hence, improvement of evacuation plans for welfare service facilities having many elderly people who need assistance in the event of a disaster is an urgent issue. The aim of this study is to we can clarify what kind of information should be shared with their successors based on the disaster knowledge possessed by the staffs of the welfare service facilities.

To this end, I conducted the following research and analysis. First, I identified what kind of disaster knowledge acquired from the Great East Japan Earthquake. Second, I asked the responsible officials of the facilities about tsunami inundation area and evacuation dangerous area at the time of disaster. Third, I explored the current issues of disaster information sharing.

The study area is Oarai-machi, Higashi Ibaraki-gun, Ibaraki prefecture, that suffered the tsunami disaster at the time of the Great East Japan Earthquake. I chose five respondents from welfare facilities in Oarai-machi by employing a semi-structured interview.

The results of this study are summarized as follows. The evacuation behavior of the welfare service facility is not necessarily related to the location of the facility. The interview survey revealed that the staff did not trust the information of the tsunami hazard map issued by the administration nor the evacuation manual but they rely on the disaster knowledge. Concerning the tsunami inundation range considered by the responsible staffs at the time of the disaster, the information varied with experience of the Great East Japan Great Earthquake.

In the evacuation dangerous area considered by the staff responsible for earthquake response, the dangerous places considered depend on the site of the facility location. Reasons for answering the dangerous area can be divided into two types: natural and artificial. The accuracy of disaster knowledge as for the tsunami inundation range depends on the experience of the Great East Japan Earthquake.

These findings suggest that the staff responsible for the disaster response is likely to take evacuation decision and evacuation behaviors based on their disaster knowledge in the future. Nevertheless, they do not share and make correction of disaster knowledge with staffs of other facilities. Hence transmission of knowledge from experience was not done. A cause of it can be the high turnover rate of welfare service staff; the staffs are too busy with, day-to-day correspondence, there is no time to think about the disaster. In addition, weak relationship between facilities can prevent information sharing. In the future, it is important to inherit knowledge from experience to staff who have no disaster experience and to share and modify knowledge among peers in welfare facilities.

Keywords: disaster information, tsunami, welfare facilities, hazard map, Oarai-machi