

## Effects of seismic hazard map over low risk area residents

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A purpose of this study is to measure the critical levels of fearfulness for the long-term earthquake forecast that included the return period and probability and examined the effectiveness of several ways of communication. Participants were 2000 householders or their spouses in Tokyo metropolitan area who were from 35-55.

Results indicated that 1)values of the critical levels were different by the methods of measurement, and 2)presenting a probability by a color in the color scale rather than a number itself was more effective in the high-vulnerable group. The way to improve the current presentation of the map was discussed.

In preparation for the earthquake centered directly under the capital and the earthquake in the Nankai Trough, it is expected that disaster prevention measures are applied as soon as possible. But it is hard to say the measures to the catastrophe are sufficient. We thought that one of the causes that disaster prevention measures do not proceed is that risk communication of the earthquake is not functioning. Therefore, we conducted a survey to know how the people perceive the probability of the seismic hazard map.

About Shindo scale, the 80 % of people take disaster prevention measures at Shindo 5 upper. The risk perception of people who live in the area where the seismic risk is high improved by seeing the seismic hazard map. But this trend could not be seen at people who live in the area where the seismic risk is middle. On the other hand, if the risk perception is increased, they do not try to take disaster prevention measures. This result says that it is difficult to promote to take disaster prevention measures only by information of seismic hazard made by experts.

In the presentation, we explain the improvement plan of seismic hazard map and the results of an additional survey that was carried out in a low area (0 to 0.1%) of the probability of seismic hazard map.

Keywords: seismic hazard map, risk, risk perception, earthquake, disaster prevention, disaster