Characterizing Japanese perception on COVID-19 vaccination based on the extended parallel process model after reclassification of the disease: Cross-sectional online survey

Shinichiroh Maekawa

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St. Luke's International University

Graduate School of Public Health

Supervisor: Associate Professor Satomi Sato

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Abstract

Background:

In May 2023, the Japanese government changed the legal classification of COVID-19 to Class 5. The booster dose vaccination rate has been low, with the rate of the 3rd dose at 65.2% for the population in their 40's, and 58.9% for those in their 30's, despite repeated calls for vaccination by the government. It is inferred that this may be the result of changes in people's perception of COVID-19 and vaccination, but no common opinion has yet been obtained. This research uses the framework of the extended parallel process model (EPPM) to quantify the perceived threat and perceived efficacy of health proposals and aims to gain a better understanding of current public perceptions about COVID-19 and vaccination.

Methods:

Responses on perceived threat of COVID-19, perceived efficacy of health proposals, and behavioral intention were obtained using a web-based Likert-scale questionnaire, from a total of 500 people living in Tokyo, including 100 people from each age groups, 20's through 60's. The participants were asked about the perceived efficacy of hand sanitization and vaccination as health proposals, as well as behavioral intention of these two measures. Differences in perception across age groups of these two health proposals were assessed.

Results:

There were no differences in the perceived threat between the age groups. While there was no difference in the perceived efficacy of hand sanitization, the perceived efficacy of vaccination was significantly lower in participants aged 20-49 years compared to those aged 50-69 years. The behavioral intention for vaccination was also lower in participants aged 20-49 years compared to those aged 50-69 years, while there was no difference in behavioral

intention for hand sanitization. Perceived efficacy was found to have an impact on vaccination behavioral intention. In addition, when participants were classified according to the level of perceived threat and efficacy for vaccine proposal, polarization into a no response segment and a danger control segment was observed, with the no response segment being the most common in participants aged 20-49.

Conclusion:

Current people's perception of COVID-19 and vaccination was characterized. To improve the vaccination rate, it was found to be necessary to restructure the communication strategy according to the identified segments.