

## Factors of nursing students related to the baseline knowledge and attitude toward LGBTQ+ people

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### 【Introduction】

Nurses have a responsibility to have up-to-date frontline knowledge of and provide care for LGBTQ+ people. Generally, it is difficult to alter prejudices once they are established. Therefore, intervention at a younger age may be a more effective approach. Intervention studies and studies exploring nursing students' baseline knowledge and attitude for the LGBTQ+ community have been conducted in the U.S. However, in Japan very few intervention studies and no studies to explore the factors related to nursing student's knowledge and attitude toward LGBTQ+, have been conducted. This study aimed to elucidate Japanese nursing students' knowledge, attitude and factors relating to these.

### 【Method】

An online survey was conducted at a medical university in Japan in April 2022. Participants were 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year nursing students (N = 171). Demographic data included age, nationality, sex at birth, sexual orientation, gender identity, and experience with the LGBTQ+ community. Knowledge was measured by a 16-item two-choice scale based on a previous study (Hayakawa & Asazawa, 2019), adding two items. Correct answers were counted, which ranged 0-16. Attitude was measured by a 12-item 5-point Likert scale based on a previous study for medical students in English (Wahlen et al., 2020). The first and second authors translated it into Japanese, modifying it to be more appropriate for nursing students (range: 0-60 points). Higher scores on both questionnaires indicated higher knowledge and positive attitudes toward the LGBTQ+ community. Shapiro-wilk test indicated neither of the baseline scores were normally distributed. Spearman's collation test was conducted for the association between ratio/ordinal variables (age and relationship with LGBTQ+ community) and each baseline score. Mann-Whitney U test was conducted for the association between 2 group independent nominal variables (nationality and sex at the birth) and each baseline score.

Kruskal-Wallis test and Dunn test-Bonferroni was conducted for 3 or more independent nominal variables (grade, gender identity and sexual orientation) and each baseline scores. Cronbach's alpha was used to evaluate the reliability of Attitude scale. This study was approved by the ethics committee of the Tokyo Medical and Dental University. (Approval No.C2021-015)

### 【Results】

A total of 163 students responded to the questionnaire with response rate of 95% (years 2<sup>nd</sup> = 51, 3<sup>rd</sup> = 58, 4<sup>th</sup> = 54). The Cronbach's  $\alpha$  of Attitude scale was 0.705. The mean score for knowledge was  $11.0 \pm 1.6$  (median: 11.0) and the mean score for attitude was  $52.7 \pm 4.8$  (median: 53.0). Students who had a closer involvement with the LGBTQ+ community had higher knowledge scores ( $p=0.187$ ,  $p=0.017$ ), but there was no association with attitude score.

### 【Discussion】

This study indicated that students who are close to or have been involved with the LGBTQ+ community have higher knowledge regarding LGBTQ+. Thus, lessons that include interacting with LGBTQ+ people can be effective for appropriate knowledge and interaction. Further research needs to be conducted for Japanese nursing student knowledge and attitudes toward LGBTQ+ community at several university.

### 【Conflict of interest】

The authors have no conflict of interest to declare.

### 【Reference】

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