A Look at the Community-Quota System for Rural Medicine and Student Attitudes at Juntendo University

CHIKAKO NAOE*

*Faculty of Medicine, Juntendo University, Tokyo, Japan

In Japan, until 2007 the number of medical school enrollment had decreased from 8,280 to 7,625 due to the prediction of future surplus of medical doctors. However, the decision was reversed and now 9,419 students enter medical school. In order to improve the geographical disparities, a special quota was allocated for applicants who are willing to stay in the prefecture where the school is located; it is called community-quota (chiiki-waku). Chiiki-Waku was started in 2008 and 2,293 students of the quota graduated by 2018¹⁾.

On the other hand, according to a report from Nagasaki²⁾, 54% of the community-quota students had returned their scholarship and withdrawn (34.6% was still at school). While 30% of the students enrolled as quota expressed their willingness of engaging community medicine but less than 10% of the graduates chose the primary care as their specialty³⁾. Among 67 colleges which have instituted Chiiki-Waku system, 30 colleges provide lectures about community medicine and 26 send students to community rotation⁴⁾.

To explore what affect medical students' willingness to practice in underserved areas, I conducted a cross-sectional survey involving Chiiki-Waku students from second to final year at Juntendo University. The questionnaire asked students their future career preference including a specialty, area of practice, and types of medical facilities. I analyzed the association with time spent in rural clinics as a student. Response rate was 92.4% (61 of the 66 Chiiki-Waku students). Analysis of covariance was used to test for the differences. The potential confounders (*i.e.* gender, year in medical school and the types of Chiiki-Waku) were adjusted in the analyses.

This study demonstrated that the Chiiki-Waku students (years 2 to 6) who participated in electives at rural practice expressed more interest in working in a rural area and tended to choose specialties in primary care, such as pediatrics ($p < 0.05$). Moreover, students who experienced rural practice had positive perceptions toward community medicine compared with their retrospective feelings upon first entering medical school.

Further follow-up study is needed to elucidate the causal effects of clinical experience in rural areas on their perception of future career.

Key words: medical education, Chiiki-Waku (community-quota system), career preference, rural medicine, cross-sectional study

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Chikako Naoe

Faculty of Medicine, Juntendo University

2-1-1 Hongo, Bunkyo-ku, Tokyo 113-8421, Japan

TEL: +81-3-3813-3111 E-mail: med2114081@stud.juntendo.ac.jp

Research of the 2nd Alumni Scientific Award for Medical Student, Juntendo University School of Medicine

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Figure-1 The proportion of students preferred to work in rural area (n=61)

Figure-2 Means of changes in scores* of willingness to work at rural areas among students with rural clinic experience

* Differences between retrospective scores upon entering medical school and at present.

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