**Investigation of Admission Systems in Medical Departments of Universities in Japan**

O. Atsuhiro Hayashi*1, Hidetoki Ishii*2, Kei Ito*1, Kumiko Shiina*1, Shuichi Iwatsubo*3, Haruo Yanai*1, Atsushi Akane*4, Takeshi Aso*5, Jun'ichiro Iwahori*6, Chiyoko Uchida*7, Masaru Kawasaki*8, Nobuhiko Saito*9, Ryuji Takeda*10


March 1, 2006
International Workshop on Entrance Examinations for Medical Universities, National Center for University Entrance Examinations, Tokyo

**Purpose**

We surveyed professors from medical departments at universities throughout Japan to investigate the following:

1. What abilities patients favor in medical doctors
2. What medical schools in Japan are innovative
3. What selection criteria candidates must meet and what subjects and courses they study

---

**Japanese System for Entering Medical Department of University**

**HS:** enter medical department or medical university after finishing high-school (6-year program) via Entrance Examinations.

**TF:** enter medical department after graduating from 4-year courses in disciplines other than medicine. Applicants who pass examinations join the 2nd or 3rd year of the course as transfer students.

**MS:** In Japan, we do not currently have medical schools for university graduates [like the North American system].

---

**Survey Methods**

- **Subjects:** Medical department faculty members at national, public, and private universities
- **Date of survey:** March to June, 2004
- **Questionnaires sent to:** 12,000 faculty members
- **Received responses:** 3,993 responses
- **Relatively high response rate:** 33%

---

**Questionnaire Consists of 5 Parts:**

- **Part A:** Abilities required for medical doctors to be favored by patients
  - 47 items (4-point scale) + 1 item (free answer)
- **Part B [HS]:** Application to medical department (MD) after finishing high school
  - 1 item
- **Part C [TF]:** Application to MD after finishing 4-year courses other than medicine
  - 6 items (multiple choice) + 4 items (free answer)
- **Part D [MS]:** Application to Medical School (MS) if this system is established in Japan
  - 4 items (multiple choice) + 4 items (free answer)
- **Part Z:** face sheet (respondent's attributes)
  - 5 items

---

**Reclassification of Specialties of Medical Fields**

- **From 2 classifications:**
  - Basic fields: basic medicine, social medicine
  - Clinical fields: clinical medicine (internal medicine) and clinical medicine (surgery)
- **To 3 classifications:**
  - Basic fields: basic medicine, social medicine: 28.8%
  - Clinical medicine (internal medicine): 33.1%
  - Clinical medicine (surgery): 33.9%
- **3 classifications work better than 2**
Survey Goals
- What faculty members think of TF
- What faculty members think of MS
- What subjects are necessary for entrance examinations into TF and MS
- What abilities are required for medical doctors to be favored by patients

Views on Accepting Graduate Students from 4-year Courses

Views on Accepting Graduate Students from 4-year Courses by University Type

Capacity for TF

Basic Medicine is eager to have TF.

Timing for Accepting TF

Private universities are eager to accept TF.

Surgery prefers late acceptance (transferring into higher year of course).
Younger groups have more difficulty deciding to accept TF than older groups.

On the whole, Basic Medicine is eager to establish MS.

Older age groups are eager to establish MS.

Results from Analysis
- Basic Med. eager to TF and MS
- Clinical Med.: Some agree with the current method (HS, TF)
- Younger group: some satisfied with current method
- Older group: eager to establish MS
- Private univ. prefer MS more than National univ.
- Developing common examination for MS
- Younger group cannot decide which is better
- Older group: half agree and half disagree (Basic Med.)
Abilities in Medical Doctors Favored by Patients

- Ability to express oneself well
- Communicative ability
- Comprehensive ability
- Logical thinking ability
- Ability to judge objectively
- Humanity and common sense
- Judgment from multidimensional viewpoints
- Empathy
- Ability to summarize information
- Ability to lead various viewpoints to a conclusion

Differences in Abilities Preferred Among 3 Classifications

Subjects Required for Medical Department Admissions

[HS]
- English, Mathematics, Japanese Language, Biology, Personal Interview, Chemistry, Physics, Personal Essay, Japanese Communicative Skills, Non-curriculum-based achievement test

[TF, MS] need similar subjects
- English (undergraduate level), Personal Interview, Personal Essay, Mathematics, Biological Sciences, Communicative Skills
- Essay describing motives for applying to MD after finishing 4-year course at university
Necessary High School Subjects for Medical Department Admissions

- English (NCT)
- Mathematics (NCT)
- English
- Japanese (NCT)
- Biology (NCT)
- Physics (NCT)
- Interview
- Chemistry (NCT)
- Mathematics
- Biology
- Physics (NCT)
- Essay
- Non-curriculum-based achievement test

Select 2 out of 4 subjects of NCT
Select 2 out of 6 subjects of NCT

Necessary University Subjects for Medical Department Admissions

- Interview
- English
- Essay
- Mathematics
- Biology
- UG level biological sciences
- Japanese
- Chemistry
- Written reasons for applying to MS
- Test measuring communicative ability
- UG level mathematics
- BIOLOGICAL SCIENCES
- UG level of English
- G. Med. (TF)
- Surgery (TF)
- G. Med. (MS)
- Surgery (MS)

Desirable Courses of Applicants for TF and MS

- Any
- Law
- Science
- Engineering
- Agriculture
- Pharmacy
- Nursing
- Dental surgery
- Care & welfare

Conclusion (1)
Views on Medical School in Japanese Universities

- Establishing MS will cause a big change in medical education in Japan.
- However, 60% of faculty members favor establishing a MS.
- Moreover, faculty members in higher age groups who oppose TF from non-medical courses are comparatively eager to accept such students in MS.

Conclusion (2)

Now need to:
- Investigate timing for introducing MS in Japan
- Examine how to restructure medical education system in Japan
- Develop school subject examinations and examinations measuring communication ability and comprehensive ability

Contact Information

- Atsuhiro Hayashi (林 篤裕)
- hayashi@rd.dnc.ac.jp
- Research Division,
  The National Center for University Entrance Examinations (NCUEE)
- 2-19-23 Komaba, Meguro-Ku, Tokyo, 153-8501, JAPAN
- Phone: +81-3-5478-1278
- Fax: +81-3-5478-1297