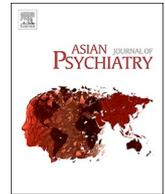




ELSEVIER

Contents lists available at ScienceDirect

## Asian Journal of Psychiatry

journal homepage: [www.elsevier.com/locate/ajp](http://www.elsevier.com/locate/ajp)

## Improvement of clinical clerkship for medical students by incorporating ideas from junior residents: A feasibility study



To constantly improve the quality of clerkship for medical students, it is ideal to reflect ideas of students and doctors who have actually experienced it. While there is one study that implemented changes in the program according to direct feedback from students (Cherry-Bukowiec et al., 2015), one concern is that they may not be able to appropriately evaluate the program due to lack of their clinical experiences. In this respect, junior residents (PGYs-1 and 2) who recently completed the clerkship and are now engaged in clinical practice would be an ideal source of information for the improvement of the clerkship program. We therefore conducted a feasibility study to implement multifaceted improvements of a clerkship program in psychiatry based on the suggestions collected through interviews of junior residents.

This study was conducted at the Department of Neuropsychiatry, Keio University School of Medicine in Japan from April 2017 to March 2018. Inclusion criteria of study participants were medical students and junior residents who were capable of providing informed consent. There were no exclusion criteria. Fifty-seven junior residents were interviewed for 30 to 45 min with the following questions: “what experiences you had during your clerkship were meaningful or meaningless in retrospective?” and “what do you think should be implemented in the current clerkship program?” A panel of four consultant psychiatrists examined their responses, discussed potential revisions of the clerkship program, and revised it after reaching consensus. The interview of junior residents followed by subsequent revision of the clinical clerkship program was repeated throughout the study period. Achievement levels of the seven goals (i.e. acquiring clinical competency in psychiatry, understanding the roles of psychiatrists, developing clinical reasoning, understanding illness pathology and epidemiology, participating in psychiatric treatments, learning basic skills of psychiatric interviews, and understanding how to consult psychiatrists) defined by the Japanese Medical Education Model Core Curriculum were self-rated on a five-point scale by the 114 students, who were divided into 16 groups, upon completion of the two-week clerkship. Scores on the self-reported scale were compared before and after each program change, using a Student's *t*-test.

By incorporating the ideas, we revised our clerkship program as follows. From the 3rd student group, we started an additional mentorship by senior residents (PGYs-3 and 4) to achieve closer relationships between doctors and students. Simultaneously, to facilitate their active involvement in clinical practice, the students were given opportunities to interview new outpatients to determine psychiatric diagnoses, followed by timely feedback from the supervisors. In addition, we provided tips on what to especially observe before each interview.

From the 4th group, we started lectures about rating scales of symptomatology for their better understanding of psychopathology. Lectures about report writing were also provided. Moreover, we more frequently asked face-to-face questions regarding diseases and treatments. Additionally, we started lunch meetings with the department professor and training director once every two weeks to enhance the doctor-student relationship and provide detailed information on potential career development plans in our department. From the 10th group, we started to review relevant topics in past national examinations to clarify short-term goals. From the 12th group, we employed the Mini Clinical Evaluation Exercise to provide feedback to adhere to the international standard. These revisions were successfully completed, demonstrating good feasibility.

Unexpectedly, no differences were found in the self-reported achievement levels in any of the seven goals between any pre- and post-revisions (Table 1). There are two possibilities of the lack of improvement in the self-reported achievement levels. First, the five-point assessment scale may be too simple to detect differences, if any. Moreover, the scale does not cover some of the relevant aspects, including fundamental attitudes towards psychiatric care (Alzahrani, 2019) and stigma in psychiatry (Kumar et al., 2018.). Additionally, long-term effects of this revision in the clerkship program were not evaluated. In the past report by Cherry-Bukowiec and colleagues (Cherry-Bukowiec et al., 2015), after program changes were implemented in the acute care surgery clerkship according to direct feedback from students, there was an increase in the percentage of students who chose the department for a rotation. Thus, a variety of objective assessments that cover multiple aspects may be needed to assess the relevance of the revision of the clerkship program. Second, the changes to the clerkship program were mostly implemented from the 3rd or 4th student group of the 16 groups. Furthermore, the changes mainly focused on practical instruction and evaluation methods in light of the preliminary nature of the present study, but they did not include any fundamental, drastic program revision. Considering that fundamental changes to the program usually need two years (Cherry-Bukowiec et al., 2015), it would have been ideal to spend a longer time to undergo more comprehensive revision.

In conclusion, the present study has demonstrated a feasibility to implement multifaceted, consecutive changes of clinical clerkship in psychiatry, based on the opinions of the junior residents. Actual effects of these methods on their future practice clearly warrant future investigations ideally in the long run.

<https://doi.org/10.1016/j.ajp.2019.07.040>

Received 8 July 2019

1876-2018/ © 2019 Elsevier B.V. All rights reserved.

**Table 1**

Scores on the self-rated five-point scale on their achievements upon completion of the two-week clerkship.

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7
Group 1	4.9 ± 0.4	5.0 ± 0.0	3.9 ± 0.7	4.3 ± 0.8	4.3 ± 0.8	4.3 ± 0.8	4.4 ± 0.5
Group 2	3.7 ± 0.5	4.4 ± 0.5	3.4 ± 0.5	3.7 ± 1.0	3.6 ± 0.8	4.3 ± 0.8	3.3 ± 0.8
Group 3	4.1 ± 0.9	4.7 ± 0.5	4.0 ± 0.8	3.7 ± 0.5	3.9 ± 1.11	3.9 ± 1.1	3.0 ± 0.8
Group 4	4.1 ± 0.4	4.4 ± 0.5	3.9 ± 0.7	4.0 ± 0.6	3.7 ± 0.8	4.1 ± 0.7	3.3 ± 0.8
Group 5	4.7 ± 0.8	4.9 ± 0.4	4.7 ± 0.5	4.9 ± 0.4	4.9 ± 0.4	4.9 ± 0.4	4.7 ± 0.8
Group 6	4.0 ± 0.6	4.6 ± 0.5	4.0 ± 0.6	3.7 ± 1.1	3.6 ± 1.1	4.0 ± 1.0	3.7 ± 0.8
Group 7	3.9 ± 0.9	4.6 ± 0.5	4.0 ± 0.6	3.7 ± 1.0	4.1 ± 0.7	4.0 ± 1.0	3.6 ± 1.4
Group 8	3.4 ± 0.8	4.1 ± 0.7	3.0 ± 0.6	3.4 ± 1.0	3.3 ± 1.0	3.7 ± 0.8	3.1 ± 1.1
Group 9	4.5 ± 0.8	4.8 ± 0.5	4.3 ± 0.5	4.0 ± 0.8	3.6 ± 1.1	3.8 ± 0.9	3.0 ± 1.5
Group 10	4.9 ± 0.4	5.0 ± 0.0	4.4 ± 0.8	4.6 ± 0.5	4.4 ± 0.8	4.6 ± 0.5	4.0 ± 0.6
Group 11	4.4 ± 0.8	4.4 ± 0.8	4.0 ± 1.0	4.4 ± 0.8	4.1 ± 0.9	4.3 ± 0.8	4.1 ± 0.9
Group 12	3.4 ± 0.8	4.4 ± 0.8	3.9 ± 0.7	3.6 ± 1.1	3.3 ± 1.0	4.0 ± 1.2	3.9 ± 1.2
Group 13	4.3 ± 0.5	4.7 ± 0.5	3.0 ± 0.8	3.7 ± 0.8	4.0 ± 0.8	3.4 ± 0.5	3.3 ± 1.0
Group 14	4.4 ± 0.7	4.6 ± 0.5	4.1 ± 0.6	4.3 ± 0.5	4.4 ± 0.7	4.3 ± 0.7	3.9 ± 0.8
Group 15	4.3 ± 0.8	4.4 ± 0.5	3.6 ± 0.8	3.4 ± 0.5	4.1 ± 0.4	3.7 ± 0.8	3.3 ± 0.5
Group 16	4.6 ± 0.5	5.0 ± 0.0	4.3 ± 1.0	4.3 ± 0.8	4.4 ± 0.5	4.1 ± 1.2	4.1 ± 0.4

<sup>†</sup>Mean ± SD scores are depicted.

<sup>‡</sup>Goal 1. Acquiring clinical competency in psychiatry; Goal 2. Understanding the roles of psychiatrists; Goal 3. Developing clinical reasoning, understanding illness pathology and epidemiology; Goal 4. Understanding illness pathology and epidemiology; Goal 5. Participating in psychiatric treatments; Goal 6. Learning basic skills of psychiatric interviews; Goal 7. Understanding how to consult psychiatrists.

<sup>§</sup>In the Mann-Whitney U test, there were no statistically significant differences in any of the seven goals between the groups 1–2 and 3–16, the groups 1–3 and 4–16, the groups 1–9 and 10–16, or the groups 1–11 and 12–16.

#### Financial disclosure

None.

Hitoshi Sakurai<sup>a,b,\*</sup>

<sup>a</sup> Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan

<sup>b</sup> Department of Psychiatry, Massachusetts General Hospital, Boston, MA, USA

E-mail address: sakuraihitoshi4986@gmail.com.

#### Declaration of Competing Interest

None.

Hiroyuki Uchida<sup>a,b</sup>

<sup>a</sup> Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan

<sup>b</sup> Geriatric Mental Health Program, Centre for Addiction and Mental Health, Toronto, ON, Canada

#### Acknowledgment

None.

Takahito Uchida

Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan

Masaru Mimura

Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan

#### References

- Alzahrani, A., 2019. Assessing the attitudes of medical students towards psychiatry: a new paradigm. *Asian J. Psychiatr.* 43, 17–23.
- Cherry-Bukowiec, J.R., Machado-Aranda, D., To, K., Englesbe, M., Ryszawa, S., Napolitano, L.M., 2015. Improvement in acute care surgery medical student education and clerkships: use of feedback and loop closure. *J. Surg. Res.* 199, 15–22.
- Kumar, P., Jangid, P., Sethi, S., 2018. Undergraduate psychiatry in India: a SWOT analysis. *Asian J. Psychiatr.* 33, 46–51.

\* Corresponding author at: Department of Psychiatry, Massachusetts General Hospital, 1 Bowdoin Square, 6th Floor, Boston, MA, 02114, USA.