

Impact of half-day clinical training in outpatient psychiatry on perception of mental illness by postgraduate interns

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Aim: Lack of contact with patients with mental illness may contribute to mental health stigma. We conducted a half-day training program in the outpatient psychiatry clinic of a rural general hospital for postgraduate interns in Nagasaki University Hospital. Our study investigated the effectiveness of this program in reducing stigma toward mental illness. It also examined the association between an intern's perception of mental illness and their consideration of psychiatry as a career.

Methods: Participants were 12 interns at Nagasaki University Hospital who completed a pre- and post- training questionnaire. The questionnaire assessed perceptions of mental illness using a semantic differential scale and measured consideration of psychiatry as a career on a 7 point Likert scale. Paired t-tests were used to compare mean pre- and post-training scores on the semantic differential scale. Pearson's correlation was used to examine associations between semantic differential scores and consideration of psychiatry as a career.

Results: Post-training scores were higher than pre-training scores on the items "warm" ($P = 0.003$), "clean" ($P = 0.009$), "bright" ($P = 0.001$), and "calm" ($P = 0.003$) as associated with mental illness. Consideration of psychiatry as a career significantly correlated with post-training score on "warm" ($r = 0.587$, $P = 0.045$).

Conclusion: Interns can develop positive perceptions of mental illness after a half-day training program in a psychiatry outpatient clinic. Perceptions of mental illness as "warm" after training correlated with consideration of psychiatry as a career.

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Introduction

Stigma toward mental illness has been recognized as an important problem worldwide. Mental health stigma may be expressed not only by the general population¹, but also by health care workers.^{2,3} Medical education has addressed the issue of mental health stigma among trainees in healthcare,^{4,5} which is also a problem in Japan.⁶ Among the various strategies

developed to reduce stigmatizing attitudes, contact with patients and educational programs have been noted to be effective methods.⁷ Clinical clerkships can thus reduce negative attitudes toward patients with mental illness among medical students.^{8,9}

Since 2004, an internship lasting at least 2 years, including a psychiatry rotation of at least one month, has been mandatory for medical graduates in Japan. However, a revision of the internship system in 2009 made psychiatry an optional rotation;

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consequently, some medical graduates are not trained in psychiatry.

This study evaluated a training program for interns in a Japanese teaching hospital held from October 2018 to March 2020. This training was available even to interns whose rotations did not include psychiatry. The interns visited a rural general hospital with a clinical supervisor and spent half a day in the outpatient psychiatry clinic, where they interviewed an average of 10 patients over the course of half a day. With the consent of the patients, the intern conducted the interview independently, while the clinical supervisor observed from a concealed location.

The study aimed to investigate the effect of half a day of outpatient psychiatry training reduced stigma toward mental illness. Attitudes toward mental illness are also related to choosing psychiatry as a career.¹⁰ Therefore, the study also examined how perceptions of mental illness related to the consideration of psychiatry as a career.

Materials and Methods

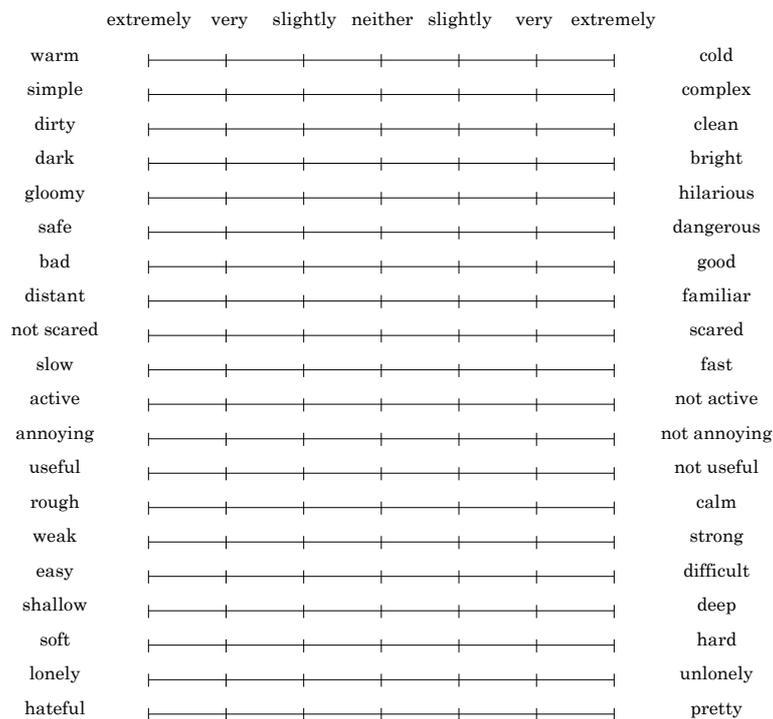
A total of 12 interns at Nagasaki University Hospital who received psychiatry outpatient training from April 2019 to March 2020 were invited to participate in the study.

Participants were informed both orally and in a leaflet about the survey and invited to complete a questionnaire. Responses were confidential and anonymized. This study was approved by the ethical review board of Nagasaki University.

Participants completed a semantic differential (SD) scale pre- and post-training. This type of scale has long been used to evaluate perceptions of mental illness.¹¹ We adopted the questionnaire used in a previous study in Japan¹² that has been influential in shaping research on attitudes toward mental illness. The SD scale comprised 20 adjective pairs with responses made on a 7-point Likert scale (Figure 1a). Participants also completed a question measuring how much they were considering psychiatry as a future career on a 7-point Likert scale before training (Figure 1b).

a.

How do you have perception toward mental illness? Please mark the circle closest to your feelings among 7 scale below. Please answer with your honest impression.



b.

How do you consider psychiatry as a career?

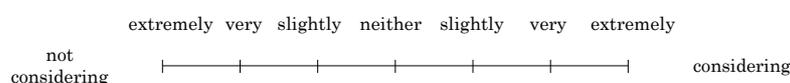


Figure 1. a. Semantic differential scale questionnaire to evaluate perceptions of mental illness.

b. Item to evaluate consideration of psychiatry as a career.

SD scale item responses were scored from 1 to 7, with higher scores signifying positive perceptions. Mean pre- and post-training scores for each item were compared using the paired t-test. Correlations between pre- and post-training SD scale scores and the score on consideration of psychiatry as a career were evaluated using Pearson's correlation coefficient. When $P < 0.01$ for the paired t-test or $r > 0.30$ for the correlation, we judged the data to be statistically significant. Statistical analyses were performed using IBM SPSS Statistics version 26.0 for Windows (IBM, Armonk, NY, USA).

Results

All 12 interns agreed and completed the survey (response rate: 100.0%). The mean age of participants was 27.6 years (standard deviation = 5.31). There were nine males (75.0%) and three females (25.0%). Two participants had already completed a psychiatry rotation at the time of training. Of the ten who had not, three had scheduled rotations while seven did not intend to rotate in psychiatry. The mean score for consideration of psychiatry as a career was 2.83 (standard deviation = 1.47).

The mean pre- and post-training SD scale scores are shown in Table 1. For the items "warm" ($P = 0.003$), "clean" ($P = 0.009$), "bright" ($P = 0.001$), and "calm" ($P = 0.003$), post-

Table 1. Mean semantic differential scores at pre- and post-clinical training

	Pre-training	Post-training	
warm	3.75	5.00	**
simple	1.75	2.42	
clean	3.75	4.92	**
bright	2.67	4.42	**
hilarious	3.08	4.17	
safe	3.25	4.17	
good	3.83	4.33	
familiar	4.73	5.64	
not scared	3.25	4.58	
fast	3.33	3.67	
active	3.92	4.42	
not annoying	4.17	5.17	
useful	4.33	5.08	
calm	3.42	5.00	**
strong	3.58	3.83	
easy	2.42	2.83	
deep	5.67	5.58	
soft	3.64	4.55	
unlonely	3.33	3.75	
pretty	4.00	4.08	

** $P < .01$

training scores were higher than pre-training scores.

Pearson's correlations between pre- and post-training SD scale scores and the score for consideration of psychiatry as a career are shown in Table 2. The score for consideration of psychiatry as a career was significantly correlated with post-training scores for the item "warm" ($r = 0.587$, $P = 0.045$). The participants' individual score of each scales in the item "warm" are shown in Table 3.

Table 2. Pearson's correlations between semantic differential scores and consideration of psychiatry as a career

	Pre-training	Post-training
warm	0.225	0.587 *
simple	-0.206	-0.326
clean	0.322	0.195
bright	0.127	0.057
hilarious	-0.221	0.088
safe	-0.088	-0.058
good	-0.201	0.250
familiar	-0.025	0.090
not scared	0.288	-0.098
fast	0.042	0.125
active	0.221	-0.091
not annoying	-0.035	-0.100
useful	0.072	-0.181
calm	0.105	-0.260
strong	0.222	-0.088
easy	0.355	0.148
deep	0.021	-0.176
soft	0.225	-0.091
unlonely	0.154	-0.161
pretty	0.000	-0.221

* $P < .05$

Table 3. Individual scores for the item "warm"

	SD scale Pre-training	SD scale Post-training	Considering psychiatry as a career
A	2	5	3
B	4	6	6
C	5	6	5
D	4	6	2
E	4	4	1
F	5	5	2
G	4	4	3
H	3	5	2
I	4	5	2
J	4	5	4
K	4	4	2
L	2	5	2

SD scale: semantic differential scale

Discussion

Our findings indicated that (1) a half day of training in a psychiatry outpatient clinic strengthened the interns' association of characteristics such as "warm", "clean", "bright", and "calm" with their perceptions of mental illness, and (2) interns' consideration of psychiatry as a career was correlated with the association of the characteristic "warm" with their perceptions of mental illness after psychiatry outpatient training.

The SD items that showed score increases have been included in the category of "negative emotions" in previous research.¹² No items belonging to this category showed decreased SD scale scores after training. The score of some items in this category increased with a significant of $P < 0.05$. Therefore, this clinical training may help interns to develop positive perceptions of mental illness.

Our findings suggest a half-day training program can improve attitudes towards mental illness. There is evidence that longer training interventions are associated with reduced stigma.¹³ In the present program, interns directly interviewed approximately 10 patients largely independently in a half day. This relatively large number of first-hand experience of patient interviews³ may explain the improvement in perceptions of mental illness despite the short duration of the training.

The training was held at an outpatient clinic. The large number of psychiatric beds and long psychiatric hospital stays contribute to the problem of mental health stigma in Japan. People have little chance of contact with patients with mental illness, and may have misperceptions about them.⁶ There is a need for educational programs to promote the message that recovered and stable patients with mental illness are able to live in the community.¹⁴ The direct contact between interns and mental health patients that our clinical training provided may have improved interns' attitudes to such patients. However, medical condition of patients and coaching of clinical teachers may also have affected to this result in addition to the direct contact of interns to patients.

Our findings indicate that interns who were considering psychiatry as a career felt warmth toward patients with mental illness through communication with them. The association between subjective feelings of interns and their consideration of psychiatry as a career has not been previously investigated. However, it is unclear whether interns who feel warmth toward patients eventually choose psychiatry as a career. It is also unclear how important this feeling of warmth is for psychiatrists. Views of psychiatry may be more polarized than those of other career specialties.¹⁰ Students who show a preference for psychiatry at matriculation tend to be more

likely to choose psychiatry as career at graduation.¹⁵ Thus, the impact of our clinical training on the future career choice of interns is unclear. Previous research has shown that the influence of junior clinicians, and close contact with a trusted doctor/nurse, can influence the decision to choose psychiatry as a career.¹⁶ Even in brief training programs, if interns can establish a trusting relationship with their clinical teacher, they may be more likely to consider psychiatry as a career.

Our study was limited by its small sample size. The characteristics of participants such as age and gender are diverse, and this may have affected the results. Unfortunately, our psychiatry outpatient training ended in March 2020. It is hoped that many more hospitals can provide similar clinical training programs, and similar studies can be undertaken across different centers. Second, there was a possibility of social desirability bias. Interns may tend to provide responses that would be viewed favorably by others. Further research is needed to confirm these findings.

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Declaration of interest statement

The authors declare no conflicts of interest.

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