Regular Article

Public attitudes towards the mentally ill: A cross-cultural study between Bali and Tokyo

TOSHIYUKI KURIHARA, MD,¹ MOTOICHIRO KATO, MD,² SHINJI SAKAMOTO, PhD,³ ROBERT REVERGER MD⁴ AND TOSHINORI KITAMURA, FRACPSYCH³

¹Komagino Hospital, Tokyo, ²Department of Neuropsychiatry, Tokyo Dental College, Ichikawa General Hospital, Chiba, ³National Institute of Mental Health, Chiba, Japan and ⁴Bangli State Mental Hospital, Bali, Indonesia

Abstract

The present study investigates the differences in public attitudes towards the mentally ill in Bali (Indonesia) and Tokyo (Japan), the former being a non-industrialized society and the latter an industrialized society in Asia. Seventy-seven residents of Bali and 66 residents from Tokyo were examined by a devaluation-discrimination measure and a self-assessment questionnaire to gauge their reactions to five imaginary case study vignettes consisting of three cases of schizophrenia, one case of a depressive episode, and one case of obsessive—compulsive disorder. Balinese respondents had significantly lower devaluation-discrimination measure scores, indicating a more favorable global attitude towards persons with a history of psychiatric treatment than did respondents in Tokyo. However, the extent to which people were prejudicial against mental patients in the two societies varied with the kinds of mental disorders, with Balinese having a more positive attitude to schizophrenics but more negative to depressive and obsessive—compulsive patients.

Key words

attitude, cross-cultural comparison, mental disorders.

INTRODUCTION

With the advent of social community psychiatry, a greater interest has developed in the attitudes and opinions of the community and of caregivers towards mental illness.^{1,2} Even with successful inpatient and outpatient treatment, the patients' progress may be compromised by a return to a hostile and uninformed community.³ Psychiatric labeling has a negative impact on a patients' income and work status, and may increase their environmental stress and decreases their ability to cope.⁴ A positive public attitude towards the mentally ill is a necessary prerequisite for the proper community care and treatment of such patients.

Public attitudes towards the mentally ill may be influenced by such factors as race, culture, religious conviction, and the condition of medical services.

Comparing the attitudes of American-born Asian students enrolled in a psychology course with those of Caucasian students, Sue et al.5 revealed that the Asian-Americans were more likely to associate mental illnesses with organic or somatic factors than were the Caucasian students, a finding consistent with subcultural values. Caldera and Kullgren⁶ examined the cross-cultural differences between Swedish and Nicaraguan medical students regarding their attitude towards psychiatry and found that Nicaraguan students had a significantly more positive attitude towards psychiatric patients. Yamamoto et al.⁷ reported that Thai medical students had less favorable attitudes towards the mentally ill than did Japanese medical students. This was thought to be because of Thai students' frequent contact with inadequately treated mentally ill individuals who exhibited deviant behavior as a result of the not yet fully developed state of the Thai mental health system. In the aforementioned studies, however, the respondents were students who were taking a medical or psychology course. For community care to succeed, favorable attitudes of residents who have day-to-day contact with mental patients are essential. We are unaware of any

Correspondence address: Toshiyuki Kurihara, MD, Komagino Hospital, 273 Uratakao, Hachioji, Tokyo 193-0841, Japan. Email: kurihara@sj8.so-net.ne.jp

Received 11 January 2000; accepted 22 May 2000.

T. Kurihara et al.

cross-national study that has made a direct comparison of public attitudes towards the mentally ill.

We hypothesized that residents from the general population in the non-industrialized society would be less prejudicial towards mental patients than those in industrialized society given that the mental health system in non-industrialized society is organized in such a way that there are very few psychiatric beds, suggesting an acceptance of mental patients by the community. In the present study, we compared the attitude of lay people towards the mentally ill in Bali (Indonesia) and Tokyo (Japan), the former being a non-industrialized society and the latter a major metropolitan center in an industrialized society in Asia, to test the above hypothesis. Bali is one of more than 10000 islands that make up Indonesia, an island located in South-East Asia, famous as a tourist resort and for its unique Hindu-based culture. Bali has a population of about 2.7 million and an industry that is now in the developing stage. Tokyo, the capital city of Japan, also located in Asia, is a fully industrialized city with a population of about 12 million. Although the main religions in Japan are Shintoism and Buddhism, they are not sources of daily devotion and faith, as is the case for the Balinese Hindu, but are limited to holiday religious rituals. Both places are ethnically homogeneous. There is an overwhelmingly greater number of psychiatric beds in Tokyo than in Bali (22.4 and 1.0 per 10 000 population, respectively).

METHODS

Participants

Seventy-seven residents in Bali and 66 residents in Tokyo participated in the present study. The Japanese respondents, 42 males and 24 females with a mean age of 28.9 (standard deviation, SD 9.8) years and a mean educational period of 14.5 (SD 2.45) years, were office workers who had not been enrolled in a medical or psychology course in their school days. After having obtained samples from Tokyo, we obtained samples from Bali matched for age, educational level, sex, and occupation. The Balinese respondents were office workers, 48 males and 29 females, with a mean age of 29.5 (SD 10.9) years and a mean educational period of 13.2 (SD 2.80) years.

Questionnaires

The self-assessment questionnaires used in the present study consisted of a devaluation-discrimination measure and five brief imaginary case study vignettes.

First, the devaluation-discrimination measure developed by Link et al.8 was used as a stigma measure. This consists of 12, six-point Likert items (i.e. 'strongly agree=1' to 'strongly disagree=6'), and included statements such as: 'Most people would willingly accept a former mental patient as a close friend', 'Most people believe that a person who has been in a mental hospital is just as intelligent as the average person', and 'Most people feel that entering a mental hospital is a sign of personal failure', which were designed to assess the extent to which respondents would believe that most people would devalue or discriminate against a person with a history of psychiatric treatment. The measure shows adequate internal consistency (alpha=0.76) and adequate consistency among each of the five study groups (range 0.69 in the untreated case to 0.82 for former patients). We changed the six-point original scale to a fourpoint one for use in the present study, because Balinese respondents were not accustomed to a multiple degree rating scale. A high score indicates a belief that mental patients will be devaluated and discriminated against. Translation back and forth between English and Indonesian, and also between English and Japanese, was performed to confirm that both Indonesian and Japanese versions are equivalent to the original questionnaire.

The second part of the questionnaire, which consisted of five brief vignettes showing five imaginary situations, was designed especially for the current study to further examine the attitude towards the mentally ill. Vignette 1 showed an individual suffering for more than a month from thought broadcasting (Schizophrenia Case 1). Vignette 2 showed an individual with symptoms of hallucination and withdrawal, who gradually became apathetic. The person had been hearing voices calling the person's name over a month (Schizophrenia Case 2). Vignette 3 showed an individual suffering from hallucination and delusion, who had been hearing the voice of God for several years, and had begun to perceive himself or herself as a child of God (Schizophrenia Case 3). Vignette 4 described a person with depressive mood, loss of appetite, and psychomotor retardation (Depressive episode). Vignette 5 described an individual performing a compulsive act such as tooth-brushing, who could not stop the behavior, even though he or she felt it unreasonable (obsessive-compulsive disorder, OCD). All vignettes were designed to fulfil the criteria of each disorder as classified in ICD-10.9 As in previous studies that used vignettes without a proper psychiatric diagnosis, 10-12 no information was given to indicate whether the people portraved actually suffered from a mental disorder. This was done to

examine more accurately the attitudes of respondents towards persons with psychiatric symptoms.

Participants were asked to answer the following seven questions for each vignette. (1) 'Do you think the person in the vignette is abnormal?' (Abnormality). (2) 'How would most people feel if this individual was in their neighborhood or workplace?' (Social Distance). (3) 'Do you think you too will suffer from a condition in the future like the one portrayed in the vignette?' (Self-prevalence). (4) 'Do you think this situation will resolve itself?' (Recovery). (5) 'Do most people believe this person can tell right from wrong?' (Criminal Responsibility). (6) 'Do most people believe this person can make a social readjustment?' (Social Readjustment). (7) 'Do most people feel that this individual is dangerous?' (Danger).

Participants answered the first three questions using a four-point scale (ranging from 1 to 4), and answered the remaining questions with either a 'yes' or a 'no'. The questions regarding how 'most people think' were designed to gauge the respondents' opinion. This questionnaire was originally written in Japanese, and then translated into Indonesian. It was then translated back into Japanese by a bilingual person unfamiliar with the study to ensure that the Indonesian version was equivalent to the original questionnaire.

For each item related to the vignettes, a high score indicates a tendency for respondents to perceive the person in the vignettes as abnormal (1. Abnormality), to keep a greater social distance from the individual and to feel unpleasant in the individual's presence (2. Social Distance), to think that they have a high possibility in the future of suffering from a condition like the one portrayed in the vignette (3. Self-prevalence), to think that the individual is able to recover (4. Recovery), to consider the person capable of telling right from wrong (5. Criminal Responsibility), to think that the person is able to make a social readjustment (6. Social Readjustment), and to feel that the individual is dangerous (7. Danger). A two-tailed ttest was used to assess the significance of the differences in the devaluation-discrimination measure and the four-point scales used for the case study vignette. Chi-squared (χ^2) analysis with Yates' correction was used for the two-point scales used for the case study vignettes.

RESULTS

Balinese participants had a significantly lower mean score on the devaluation-discrimination scale (mean = 20.8, SD = 2.96), than did the Tokyo subjects (mean = 25.2, SD = 4.37, t=-7.16, P<0.01). These results sub-

stantiate the hypothesis that Balinese have a more globally positive attitude towards persons with a history of psychiatric treatment than do the Japanese.

The mean ratings given by the participants to each of the five vignettes are shown in Table 1. For all three imaginary situations involving portrayal of schizophrenics, the scores for 'Abnormality' were significantly lower than those found in Bali (for Case 1, t=-3.96, P < 0.01; for Case 2, t = -4.45, P < 0.01; for Case 3, t=-8.36, P<0.01.), whereas the scores for 'Selfprevalence were significantly higher than they were in Tokyo (for Case 1, t=3.23, P<0.01; for Case 2, t=2.09, P < 0.05; for Case 3, t = 6.27, P < 0.01), indicating that the Balinese participants were less likely to perceive the schizophrenics as being abnormal, and considered themselves more likely to suffer from schizophrenia in the future than did the Tokyo participants. For two of the three schizophrenics (Cases 2 and 3), the scores for 'Social Distance' were significantly lower (for Case 2, t=-3.98, P<0.01; for Case 3, t=-7.94, P<0.01), and those for 'Recovery' and 'Social Readjustment' were significantly higher in Bali ('Recovery' for Case 2, $\chi^2 = 3.91$, P < 0.05; for Case 3, $\chi^2 = 16.6$, P < 0.01. 'Social Readjustment' for Case 2, $\chi^2 = 47.9$, P < 0.01; for Case 3, $\chi^2 = 62.3$, P < 0.01), indicating that the Balinese respondents felt less uncomfortable with schizophrenic patients and were more optimistic about the patients' chances for recovery and for making a return to society. For one of the three schizophrenics (Case 3), the score for 'Danger' was significantly lower in Bali (χ^2 =28.5, P<0.01), whereas the score for 'Criminal Responsibility' was higher ($\chi^2 = 42.4$, P <0.01), revealing that Balinese participants considered the person to have a higher ability to make judgments and to be less dangerous. All of these results demonstrate that people from the general population in Bali had a more favorable attitude towards schizophrenics than did the residents in Tokyo.

For the person with a depressive episode described in vignette 4, in contrast with the schizophrenic cases, the scores for 'Self-prevalence' and 'Recovery' were significantly lower in Bali than in Tokyo ('Self-prevalence' t=-2.75, P<0.01; 'Recovery' $\chi^2=8.56$, P<0.01), whereas the score for 'Danger' was higher ($\chi^2 = 10.0$, P < 0.01), suggesting that Balinese participants estimated less self-tendency toward depression and were less optimistic about recovery from a depressive state, and perceived depressive patients as being more dangerous. For the individual with OCD in vignette 5, the score for 'Criminal Responsibility' was significantly lower in Bali ($\chi^2 = 10.8$, P < 0.01), whereas that for 'Danger' was higher ($\chi^2 = 12.7$, P < 0.01). Such results showed that Balinese respondents tended to think the person incapable of telling right from wrong, and also

T. Kurihara et al.

Fable 1. Ratings of Balinese and Japanese respondents toward individuals described in five case vignettes

	Schizop	Schizophrenia 1	Schizophrenia 2	ırenia 2	Schizo	Schizophrenia 3	Depressiv	Depressive episode	OCD	Ð.
	Bali	Tokyo	Bali	Tokyo	Bali	Tokyo	Bali	Tokyo	Bali	Tokyo
Abnormality (mean + SD) ^a	2.56 ± 0.53	2.56±0.53 3.00±0.76**	2.81 ± 0.54	3.36±0.89**	2.60 ± 0.63	2.60±0.63 3.58±0.77**	2.43 ± 0.64	2.48 ± 0.75	2.58 ± 0.61	2.64 ± 0.77
Social distance (mean ± SD) ^a	2.36 ± 1.01	2.36 ± 1.01 2.64 ± 0.89	2.52 ± 1.07	$3.15\pm0.83**$	2.27 ± 1.07	3.50±0.77**	2.36 ± 0.96	2.51 ± 0.77	2.12 ± 1.10	2.21 ± 0.75
Self-prevalence $(\text{mean} \pm \text{SD})^a$	2.08 ± 1.01	$1.64\pm0.48**$	1.82 ± 1.00	$1.52 \pm 0.73 *$	2.08 ± 1.06	$1.21 \pm 0.41 **$	2.36 ± 0.96	2.80±0.95**	1.90 ± 1.02	2.05 ± 0.85
Recovery $(\%)^b$	48.1	57.6	32.5	16.7*	46.8	13.6**	55.8	80.3**	52.0	47.0
Criminal responsibility (%)°	57.1	63.6	50.7	36.4	63.6	9,1**	61.0	77.3	79.2	98.5**
Social readjustment (%) ^d	81.8	2.69	87.0	28.8**	88.3	21.2**	92.2	86.4	88.3	84.9
Danger (%)e	53.3	36.4	55.8	71.2	45.5	89.4**	48.1	21.2**	26.0	3.0**

 $^{\text{bcd,e}}$ These four items were scored by two-point scales and compared by χ^2 test with Yates' correction: *P < 0.05; **P < 0.01These three items were scored by four-point scales and compared using t-test: *P < 0.05; **P < 0.01OCD, obsessive-compulsive disorder. felt they were more dangerous. The results suggest that Balinese have more negative attitudes towards depressive and OCD compared with their attitudes to schizophrenics.

DISCUSSION

Balinese respondents had significantly lower devaluation-discrimination measure scores, indicating a more favorable global attitude towards persons with a history of psychiatric treatment than did respondents in Tokyo. However, the extent to which people were prejudicial against mental patients in the two societies varied according to the mental disorder, with Balinese having a more positive attitude to schizophrenics but more negative to depressive and obsessive—compulsive patients.

Studies carried out by the World Health Organization (WHO), and other researchers have clearly shown that the outcome of schizophrenia in developing countries is better than that in developed countries.¹³⁻¹⁵ This better outcome experienced by schizophrenic patients in Bali compared with Tokyo may itself generate a more positive attitude towards persons who are mentally ill. It may turn out that a favorable attitude may generate a better outcome. Previous studies have also suggested that increased contact with mental patients reduces public fear and produces a more favorable environment for accepting the patient back into society.^{3,16–18} The positive attitude towards mental patients found in Bali may be attributable to the frequent contact the public has with them given the few psychiatric beds and their short-term hospitalization.¹⁹ Ironically, the positive public attitude found in Bali may exist because of their lack of psychiatric beds not in spite of it.

Moreover, public attitudes may be affected by the public's cognition of a mental illness. According to Balinese belief, disease is caused by an interaction known as niskala and sekala. The sekala component is the concrete aspect of the illness, which can be removed by a physician. The niskala component, however, is an invisible and abstract element that is better treated by a traditional healer.²⁰ It is estimated that there are about 2500 traditional healers in Bali.²¹ Most Balinese believe that psychotic disorders are caused by a niskala component such as a supernatural power or black magic. Survani found that 76% of patients who consulted psychiatrists at the two public hospitals in Bali had been examined by traditional healers prior to referral.²² In Bali, the cause of psychotic disorders is often explained by reference to external factors, and not by referring to internal factors such as genetics or family problems. This

might be one of the reasons why the mentally ill are accepted with a positive attitude in Bali, and why the patients and their families are generally not regarded as personally responsible for the mental illness. In contrast, Madianos et al.23 reported that folk beliefs rooted in the Greek rural culture, depicting mental patients as being possessed by demons, may generate a public rejection and a more fearful attitude towards mental patients. In contrast with the Balinese situation, similar traditional ideas about mental disorders may have a negative impact on the public attitude towards mental disorders in Greece. People who have more information about mental illness are reportedly less prejudiced towards the mentally ill.^{3,24,25} The findings of the present study, however, suggest that scientific knowledge of mental illness does not appear to be the only crucial determinant of a positive public attitude. Regardless of the actual medical findings, people's ways of perceiving mental disorders may have a positive impact in some situations, such as in Bali, and a negative impact in other societies such as Greece. The mechanisms by which information and cognition of mental illnesses differentially affect public attitudes need to be investigated in future studies.

The results show that the attitudes toward patients with depressive episodes and OCD in Bali were more negative than those in Tokyo. If direct contact reduces stigmatization as previous studies suggested,3,16-18 the negative attitudes toward depressive and obsessivecompulsive patients revealed in Bali may be attributed to less frequent contact with such patients because of low prevalence rates of these illnesses. Our unpublished data revealed that there were no depressive and OCD inpatients in Bangli State Mental Hospital, which is the largest mental hospital in Bali with 255 beds, in October 1993. More accurate comparisons in the prevalence of depressive and OCD patients between the two societies need to be investigated in a further study to prove the above hypothesis.

ACKNOWLEDGMENTS

The authors thank Gohei Yagi, MD, and Aya Nishizono-Maher, MD, for their assistance with the present study.

REFERENCES

- 1. Rabkin JG. Opinions about mental illness: A review of the literature. *Psychol. Bull.* 1972; **77**: 153–171.
- 2. Bhugra D. Attitudes towards mental illness. A review of the literature. *Acta Psychiatr. Scand.* 1989; **80**: 1–12.

- 3. Penn DL, Guynan K, Daily T, Spaulding WD, Garbin CP, Sullivan M. Dispelling the stigma of schizophrenia: What sort of information is best? *Schizophr. Bull.* 1994; **20**: 567–578.
- 4. Link BG. Mental patient status, work, and income: An examination of the effects of a psychiatric label. *Am. Sociol. Rev.* 1982; **47**: 202–215.
- 5. Sue S, Wagner N, Ja D, Margullis C, Lew L. Conceptions of mental illness among Asian and Caucasian-American students. *Psychol. Report* 1976; **38**: 703–708.
- Caldera T, Kullgren G. Attitudes to psychiatry among Swedish and Nicaraguan medical students. Nord. J. Psychiatry 1994; 48: 271–274.
- Yamamoto K, Randall M, Takeda M, Leelamanit W. Attitude of medical students towards persons with mental disorders: A comparative study between Japan and Thailand. *Psychiatry Clin. Neurosci.* 1996; 50: 171–180.
- 8. Link BG, Cullen FT, Struening E, Shrout PE, Dohrenwend BP. A modified labeling theory approach to mental disorders: An empirical assessment. *Am. Sociol. Rev.* 1989; **54**: 400–423.
- World Health Organization. The ICD-10 Classification of Mental and Behavioural Disorders. WHO, Geneva, 1992.
- 10. Hall P, Brockington IF, Levings J, Murphy C. A comparison of responses to the mentally ill in two communities. *Br. J. Psychiatry* 1993; **162**: 99–108.
- 11. Elizur A, Neumann M, Bawer A. Interdependency of attitudes, diagnostic assessments and therapeutic recommendations of medical students towards mental patients. *Int. J. Soc. Psychiatry* 1986; **32**: 31–40.
- 12. McEvoy JP, Schooler NR, Friedman E, Steingard S, Allen M. Use of psychology vignettes by patients with schizophrenia or schizoaffective disorder and by mental health professionals to judge patients' insight. *Am. J. Psychiatry* 1993; **150**: 1649–1653.
- Leff J, Sartorius N, Jablensky A, Korten A, Ernberg G. The international pilot study of schizophrenia: Five-year follow-up findings. *Psychol. Med.* 1992; 22: 131–145.
- Jablensky A, Sartorius N, Ernberg G et al. Schizophrenia: Manifestations, incidence and course in different cultures. A World Health Organization ten-country study. Psychol. Med. 1992 (Suppl. 20).
- Kulhara P. Outcome of schizophrenia: some transcultural observations with particular reference to developing countries. *Eur. Arch. Psychiatry Clin. Neurosci.* 1994; 244: 227–235.
- Wolff G, Pathare S, Craig T, Leff J. Public education for community care: A new approach. *Br. J. Psychiatry* 1996; 168: 183–190.
- 17. Trute B, Loewen A. Public attitude toward the mentally ill as a function of prior personal experience. *Soc. Psychiatry* 1978; **13**: 79–84.
- 18. Link BG, Cullen FT. Contact with the mentally ill and perceptions of how dangerous they are. *J. Health Soc. Behav.* 1986; **27**: 289–302.
- 19. Kurihara T, Kato M, Yagi G. Psychiatry in Bali. *Psychiatric Rev.* 1998; **29**: 123–126 (in Japanese).

- 20. Thong D, Carpenter B, Krippner S. *A Psychiatrist in Paradise: Treating Mental Illness in Bali*. White Lotus Co, Bangkok, 1992.
- 21. Suryani LK, Jensen GD. Psychiatrist, traditional healer and culture integrated in clinical practice in Bali. *Med. Anthropol.* 1992; **13**: 301–314.
- 22. Suryani LK. Psikosis Akut pada Orang Bali Yang Beragama Hindu di Bali. Suatu Sutdi pendekatan Kliniko-Sosiobudaya. PhD Dissertation, Airlangga University, Surabaya, 1988 (in Indonesian).
- 23. Madianos MG, Madianou D, Vlachonikolis J, Stefanis CN. Attitudes towards mental illness in the Athens area: Implications for community mental health intervention. *Acta Psychiatr. Scand.* 1987; **75**: 158–165.
- 24. Roman PM, Floyd HH. Social acceptance of psychiatric illness and psychiatric treatment. *Soc. Psychiatry* 1981; **16**: 21–29.
- 25. Wolff G, Pathare S, Craig T, Leff J. Community knowledge of mental illness and reaction to mentally ill people. *Br. J. Psychiatry* 1996; **168**: 191–198.