

World Journal of *Psychiatry*

World J Psychiatr 2017 December 22; 7(4): 197-206





ORIGINAL ARTICLE

Observational Study

- 197 Effect of educational intervention on attitudes toward the concept of criminal responsibility

Shiina A, Niitsu T, Sato A, Omiya S, Nagata T, Tomoto A, Watanabe H, Igarashi Y, Iyo M

ABOUT COVER

Editorial Board Member of *World Journal of Psychiatry*, Temple Grandin, PhD, Professor, Department of Animal Sciences, Colorado State University, Fort Collins, CO 80523, United States

AIM AND SCOPE

World Journal of Psychiatry (*World J Psychiatr*, *WJP*, online ISSN 2220-3206, DOI: 10.5498) is a peer-reviewed open access academic journal that aims to guide clinical practice and improve diagnostic and therapeutic skills of clinicians.

WJP covers topics concerning behavior and behavior mechanisms, psychological phenomena and processes, mental disorders, behavioral disciplines and activities, adjustment disorders, anxiety disorders, delirium, dementia, amnesic disorders, cognitive disorders, dissociative disorders, eating disorders, factitious disorders, impulse control disorders, mental disorders diagnosed in childhood, mood disorders, neurotic disorders, personality disorders, schizophrenia and disorders with psychotic features, sexual and gender disorders, sleep disorders, somatoform disorders, and substance-related disorders. Priority publication will be given to articles concerning diagnosis and treatment of psychiatric diseases. The following aspects are covered: Clinical diagnosis, laboratory diagnosis, differential diagnosis, imaging tests, pathological diagnosis, molecular biological diagnosis, immunological diagnosis, genetic diagnosis, functional diagnostics, and physical diagnosis; and comprehensive therapy, drug therapy, surgical therapy, interventional treatment, minimally invasive therapy, and robot-assisted therapy.

We encourage authors to submit their manuscripts to *WJP*. We will give priority to manuscripts that are supported by major national and international foundations and those that are of great basic and clinical significance.

INDEXING/ABSTRACTING

World Journal of Psychiatry is now indexed in PubMed, PubMed Central.

FLYLEAF

I-IV Editorial Board

EDITORS FOR THIS ISSUE

Responsible Assistant Editor: *Xiang Li*
Responsible Electronic Editor: *Ya-Jing Lu*
Proofing Editor-in-Chief: *Lian-Sheng Ma*

Responsible Science Editor: *Li-Jun Cai*
Proofing Editorial Office Director: *Xin-Xia Song*

NAME OF JOURNAL
World Journal of Psychiatry

ISSN
ISSN 2220-3206 (online)

LAUNCH DATE
December 31, 2011

FREQUENCY
Quarterly

EDITOR-IN-CHIEF
Anantha Shekhar, MD, PhD, Professor, Director,
Indiana Clinical and Translational Sciences Institute,
Indiana University School of Medicine, 410 West 10th
Street, Suite 1100, Indianapolis, IN 46202, United States

EDITORIAL BOARD MEMBERS
All editorial board members resources online at <http://www.wjgnet.com/2220-3206/editorialboard.htm>

EDITORIAL OFFICE
Xiu-Xia Song, Director
World Journal of Psychiatry
Baishideng Publishing Group Inc
7901 Stoneridge Drive, Suite 501,
Pleasanton, CA 94588, USA
Telephone: +1-925-2238242
Fax: +1-925-2238243
E-mail: editorialoffice@wjgnet.com
Help Desk: <http://www.f6publishing.com/helpdesk>
<http://www.wjgnet.com>

PUBLISHER
Baishideng Publishing Group Inc
7901 Stoneridge Drive, Suite 501,
Pleasanton, CA 94588, USA
Telephone: +1-925-2238242
Fax: +1-925-2238243
E-mail: bpgoffice@wjgnet.com
Help Desk: <http://www.f6publishing.com/helpdesk>
<http://www.wjgnet.com>

PUBLICATION DATE
December 22, 2017

COPYRIGHT

© 2017 Baishideng Publishing Group Inc. Articles published by this Open-Access journal are distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits use, distribution, and reproduction in any medium, provided the original work is properly cited, the use is non commercial and is otherwise in compliance with the license.

SPECIAL STATEMENT

All articles published in journals owned by the Baishideng Publishing Group (BPG) represent the views and opinions of their authors, and not the views, opinions or policies of the BPG, except where otherwise explicitly indicated.

INSTRUCTIONS TO AUTHORS

<http://www.wjgnet.com/bpg/gerinfo/204>

ONLINE SUBMISSION

<http://www.f6publishing.com>

Observational Study

Effect of educational intervention on attitudes toward the concept of criminal responsibility

Akihiro Shiina, Tomihisa Niitsu, Aiko Sato, Soichiro Omiya, Takako Nagata, Aika Tomoto, Hiroyuki Watanabe, Yoshito Igarashi, Masaomi Iyo

Akihiro Shiina, Hiroyuki Watanabe, Division of Medical Treatment and Rehabilitation, Chiba University Center for Forensic Mental Health, Chiba 2608670, Japan

Tomihisa Niitsu, Aiko Sato, Masaomi Iyo, Department of Psychiatry, Graduate School of Medicine, Chiba University, Chiba 2608670, Japan

Soichiro Omiya, Social Psychiatry and Mental Health, Faculty of Medicine, University of Tsukuba, Ibaraki 3058577, Japan

Takako Nagata, Ministry of Health, Labour and Welfare, Tokyo 1008916, Japan

Aika Tomoto, Yoshito Igarashi, Division of Law and Psychiatry, Chiba University Center for Forensic Mental Health, Chiba 2608670, Japan

ORCID number: Akihiro Shiina (0000-0003-0158-3941); Tomihisa Niitsu (0000-0003-2713-700X); Aiko Sato (0000-0001-9045-7618); Soichiro Omiya (0000-0003-1958-2859); Takako Nagata (0000-0002-2562-291X); Aika Tomoto (0000-0002-6274-7893); Hiroyuki Watanabe (0000-0002-9234-928X); Yoshito Igarashi (0000-0001-5080-9527); Masaomi Iyo (0000-0002-5384-857X).

Author contributions: Shiina A planned the study protocol and mainly wrote the manuscript; Niitsu T managed the seminar and aided for the statistical analysis; Sato A contributed to carrying out the seminar; Omiya S, Nagata T and Tomoto A participated in the establishment of the study protocol; Watanabe H had a role as the conductor of the seminar; Igarashi Y administered the study; Iyo M supervised the whole study and was responsible for the funding; all authors read and approved the final manuscript.

Supported by a Grant-in-Aid for Scientific Research from the Ministry of Health, Labour and Welfare of Japan, for “Iryo-kansatsu-ho iryo ni tazusawaru jinzai no kakuho to chiiki tokusei wo fumaeta senmonka no ikusei [Cultivating of human resources engaged in the MTS Act and expert training based on regional characteristics].”

Institutional review board statement: The Ethics Council of the Graduate School of Medicine, Chiba University (Candidate

No. 1881) has approved the whole study protocol in advance of carrying out our study (August 7, 2014).

Informed consent statement: This study is a questionnaire survey to healthy volunteer. Participants were informed about the purpose of the study before the questionnaire was conducted. Replying the questionnaire was completely voluntary. As the questionnaire was anonymously posted, the authors did not collect any personal information of the participants.

Conflict-of-interest statement: The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Data sharing statement: There is no additional data available other than in this article.

Open-Access: This article is an open-access article which was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>

Manuscript source: Unsolicited manuscript

Correspondence to: Akihiro Shiina, MD, MSc, PhD, Associate Professor, Division of Medical Treatment and Rehabilitation, Chiba University Center for Forensic Mental Health, Inohana 1-8-1, Chuoh-ku, Chiba 2608670, Japan. shiina-akihiro@faculty.chiba-u.jp
Telephone: +81-43-2227171

Received: June 14, 2017

Peer-review started: June 19, 2017

First decision: July 20, 2017

Revised: August 3, 2017

Accepted: September 12, 2017

Article in press: September 12, 2017

Published online: December 22, 2017

Abstract

AIM

To evaluate the effect of educational intervention on individuals' knowledge of and attitudes toward forensic mental health.

METHODS

We conducted a questionnaire regarding attitudes toward various ideas about forensic mental health. The respondents attended a 1-h seminar regarding forensic mental health after answering the questionnaire. On completion of the seminar, the respondents answered another questionnaire containing many of the same questions as contained in the pre-seminar questionnaire.

RESULTS

A total of 86 individuals attended the seminar, and 78 responded to the questionnaire. Only 13 (18.8%) participants were supportive of the concept of criminal responsibility initially, and there was a statistically significant increase in those who became more supportive after the seminar, with 22 (33%) being supportive after the seminar (Wilcoxon signed-rank test, $P < 0.001$). Logistic regression analysis revealed that participants who were skeptical about forensic mental systems and those with fewer opportunities to see media reports regarding psychiatry were likely to become supportive of criminal responsibility after the intervention.

CONCLUSION

These results suggest that public attitudes toward criminal responsibility and mental health can be influenced *via* educational interventions.

Key words: Forensic psychiatry; Criminal responsibility; Psychiatry, Law and Ethics; Public policy; Education in psychiatry; Anti-stigma in psychiatry

© **The Author(s) 2017.** Published by Baishideng Publishing Group Inc. All rights reserved.

Core tip: Many people have an unsympathetic attitude against offenders with mental disorders. However, this seems, to some extent, to be attributable to a lack of precise knowledge about forensic mental health. We prove that public opinion toward criminal responsibility and relevant ideas regarding forensic mental health can be amended *via* brief educational interventions. Access to accurate information can help to reduce discrimination against offenders with mental disorders.

Shiina A, Niitsu T, Sato A, Omiya S, Nagata T, Tomoto A, Watanabe H, Igarashi Y, Iyo M. Effect of educational intervention on attitudes toward the concept of criminal responsibility. *World J Psychiatr* 2017; 7(4): 197-206 Available from: URL: <http://www.wjgnet.com/2220-3206/full/v7/i4/197.htm> DOI: <http://dx.doi.org/10.5498/wjp.v7.i4.197>

INTRODUCTION

Most legal systems and societies require that the criminal responsibility of the offender be proven before they are subject to sanctions. Thus, offenders who commit crimes when they are considered legally insane because of a mental disorder should not be punished. This concept is considered as rational in most developed countries for a number of reasons. First, people under the overwhelming influence of psychiatric symptoms cannot control their behavior. It is inappropriate to demand that they regulate their acts. Second, punishment is not effective to prevent recidivism for people who have committed a crime directly caused by psychiatric symptoms such as delusion. Third, the provision of immediate and appropriate psychiatric treatment, that is, diverting them from the criminal justice system to the mental health care system, is an effective way to reduce the risk of reoffending.

Despite recognition of the concept in various contexts internationally, many citizens have difficulty accepting or understanding criminal responsibility. When an individual with a confirmed or suspected mental disorder commits a sensational crime, a broad discussion is typically ignited regarding the criminal responsibility of the offender^[1-4]. Consequently, many countries are struggling to establish their own forensic mental health systems to deal with mentally disordered offenders (MDOs), while also taking into consideration the unique cultural background of each country^[5].

In the Japanese legislation, an act of insanity is not punishable, and that an act of diminished responsibility shall lead to the punishment being reduced, according to the article 39 of the Penal Code. Insanity is defined by the Supreme Court as a state without ability to recognize the difference between good and evil, and to control oneself due to mental disorders. Diminished responsibility is defined as a state with those abilities strongly impaired due to mental disorders^[6].

For many years, Japan had no specific legal provision for MDOs^[7]. Therefore, MDOs were treated under the Mental Health and Welfare (MHW) Act. After some debate, the Act on Medical Care and Treatment for Persons Who Have Caused Serious Cases under the Condition of Insanity (abbreviated to the Medical Treatment and Supervision Act, or the MTS Act) came into force in 2005^[2], coinciding with the widespread reform of the Japanese forensic mental health system. Under this new scheme, individuals committing a serious criminal offense while insane or having a diminished responsibility are dealt with within a judicial, administrative framework. The enactment of the MTS Act also meant that clinical psychiatrists would have an opportunity to collaborate with legal professionals such as judges and lawyers in the treatment of MDOs. Additionally, judges faced the necessity of learning about clinical psychiatry for appropriate decision making

under the MTS Act.

On the other hand, for those offenders that are not identified as not guilty by reason of insanity (NGRI) nor as having diminished responsibility, they are treated the same as in the past. Therefore, the degree of criminal responsibility of each offender plays a crucial role in determining their treatment. It is for this reason that significant attention is paid to the criminal responsibility of offenders in Japan.

Previously, citizens in Japan had few opportunities to be involved in discussions regarding the criminal responsibility of offenders. However, this changed with the introduction of the Lay Judge Act in 2009. This act regulates the role of lay judges, who are selected from Japanese citizens for certain legal trials. For the first time, citizens had the opportunity to take a role in the criminal trials of MDOs. Furthermore, court judges and psychiatrists, as expert witnesses, were now required to explain the concept of criminal responsibility to lay judges using precise and easy-to-understand language.

Because of the above, an awareness of citizens' levels of understanding of forensic mental health is now important. To date, there are very few reports regarding the attitudes of citizens toward the concept of criminal responsibility. A literature review from an earlier study, which was accompanied by a survey of psychiatric outpatients, only identified two unpublished online surveys on this issue. Furthermore, the validity of those surveys is questionable because of small sample sizes and biased sampling. That study suggested that more than 70% of participants were opposed to the concept of criminal responsibility, whereas psychiatric patients and their family members were generally supportive of the concept^[8].

Based on this situation, we considered it essential to examine the degree of understanding of forensic mental health among citizens in Japan using an appropriate method. We especially wanted to determine the degree to which they respected the concept of criminal responsibility. We assumed that the majority of citizens, although they may be curious about forensic mental health, have negative attitudes regarding this concept. Existing evidence suggests that Japanese citizens hold a stronger stigma against patients with mental disorders than do Australians^[9], and are more reluctant to mention mental disorders than are British citizens^[10]. His evidence points to the possibility that Japanese citizens have relatively negative attitudes toward MDOs.

We were also interested in whether individuals' opinions and attitudes can be changed *via* an educational intervention. This idea is derived from the estimation that unsympathetic attitudes toward MDOs may originate from a lack of knowledge regarding forensic mental health. Japanese people have little opportunity to learn about the situation of MDOs unless they are directly involved. Meanwhile, the media tends to sensationally report a few extreme criminal acts committed by patients with mental disorders, and these extraordinary cases are often generalized in the mind

of the public. Therefore, some people may incorrectly conclude that numerous MDOs are released out into the public without any follow-up after receiving an NGRI verdict. In reality, there are only a few NGRI verdicts annually^[6]. The situation is similar in the United States; an informal survey suggested that people have difficulty understanding the real situation regarding NGRI verdicts. Thus, they believed that 5%-20% of defendants were found NGRI, despite this rate being only 1% in reality^[11].

Considering these facts, it is expected that after learning that NGRI verdicts are very rare and that such cases receive special forensic psychiatric treatment under the MTS Act, we believe citizens will become more supportive of the concept of criminal responsibility. A more supportive attitude by citizens toward MDOs will alleviate the emotional conflict around mental disorders, and will contribute to the realization of a society that is less discriminatory against people with mental disorders.

Based on the background described above, we hypothesized that providing some specific knowledge about forensic mental health may change citizens' attitudes regarding MDOs. We planned an educational seminar on the concept of criminal responsibility and NGRI, the current situation of forensic mental health, and how MDOs are treated in special facilities. We considered a 1-h lecture would be adequate to accomplish the outcome, referring to a previous study in which a 1-h session on psychiatry was effective in changing individuals' attitudes toward mental disorders^[12].

MATERIALS AND METHODS

Overview

To test the hypothesis mentioned above, we conducted a study that combined a series of questionnaires and a seminar. This study was a single-group, open-labeled interventional confirmatory trial. We presented a seminar on forensic mental health titled "What is forensic mental health: psychiatry, psychiatric testimony, mental disorders and crimes." The seminar was held at the Inohana Festival, a college campus festival administered by the Graduate School of Medicine, Chiba University, on November 1 and 2, 2014. The seminar was open to all interested attendees. We asked the audience to answer a questionnaire before the seminar started. We then administered a further questionnaire after the seminar concluded. We compared the results of the two questionnaires (pre- and post-seminar) using statistical analysis.

Participants

The subjects of this study were the seminar attendees. Inohana Festival is a well-known campus festival within the local area. Thousands of people, mainly local residents, the families and relatives of college students and workers, and high school students who are

Table 1 Pre-seminar questionnaire

Section	Question	Answer options
Knowledge about forensic mental health	Have you heard the term “Forensic psychiatry?”	Yes or No
	Do you know the content of the MHW Act?	Well known, a little, or No
	Have you heard the concept of criminal responsibility?	Yes or No
	Did you know about the introduction of the MTS Act?	Yes or No
	Did you know about the introduction of the Lay Judge Act?	Yes or No
Opinion about forensic mental health	Opinion toward OIH	Definitely agree, relatively agree, neutral, relatively disagree, or definitely disagree
	Opinion toward the concept of criminal responsibility	Definitely agree, relatively agree, neutral, relatively disagree, or definitely disagree
	Opinion toward the MTS Act	Definitely agree, relatively agree, neutral, relatively disagree, or definitely disagree
	Opinion toward the Lay Judge Act	Definitely agree, relatively agree, neutral, relatively disagree, or definitely disagree
About the relationship between psychiatry and the mass media	Opportunity to see media reports regarding psychiatry	Many, relatively many, neutral, relatively few, or few
	Opinion toward the optimal frequency of media reports regarding psychiatry	More than now, neutral, or less than now
	Opportunity to see media reports about the relationship between psychiatry and crimes	Increased, no change, or decreased
	Opinion toward the optimal frequency of media reports regarding the relationship between psychiatry and crimes	More than now, neutral, or less than now
About the responder	Should the media maintain anonymity in reporting crime cases with mental disorders?	Definitely agree, relatively agree, neutral, relatively disagree, or definitely disagree
	Age	< 20, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, or > 79
	Sex	Male or female
	Occupation	Medical practitioner, medical student, or other

MHW Act: Mental Health and Welfare Act; MTS Act: Medical Treatment and Supervision Act; OIH: Official Involuntary Hospitalization.

interested in Chiba University, visit each year.

We recruited attendees through an advertisement of the seminar on the festival website and a poster explaining the theme of the seminar. Any people who came to Inohana Festival were permitted to attend the seminar. All of the individuals who attended the seminar and completed the pre-seminar questionnaire were included as participants in this study. There were no exclusion criteria regarding participation.

Pre-seminar survey

We designed an anonymous self-reporting questionnaire sheet to deliver to the seminar audience. On this sheet, we disclosed the title and funding information of the study. We guaranteed that those who refused to answer the questionnaire could still attend the seminar.

Seminar attendees were given the two questionnaires (pre-seminar and post-seminar) at the same time. The components of the pre-seminar questionnaire are shown in Table 1. This questionnaire was originally created for a previous study examining the attitudes of psychiatric patients toward forensic mental health^[8]. We decided to use a slightly modified version of this questionnaire because we expected to be able to compare the results of this study with those of the previous survey. In addition to the degree of knowledge about and attitudes toward forensic mental health, we also wanted to clarify the relationship between participants' perceptions about forensic mental health and their degree of exposure to media reports. We sought to do so because reporting on criminal cases with MDOs is sometimes sensationalized.

Furthermore, we were curious about the opinions of citizens toward the practice of anonymous reporting about MDOs in the media. Whether the name of a suspect should be concealed when the suspect seems to be an MDO is often discussed in Japan. Attitudes expressed in the media are mixed^[13] (Science Council in Japan, 2005), but patients with mental disorders and their families tend to approve of the practice of anonymous reporting^[8].

The questionnaire was composed of four sections: (1) knowledge about forensic mental health; (2) opinions regarding forensic mental health; (3) the relationship between psychiatry and the mass media; and (4) information about the responders. Several items were included in each section. Most of the items were ranked using a five-point scale. A serial number was attached to each pair (pre- and post-seminar) of answer sheets in advance to identify which two sheets were completed by the same participant.

We explained the purpose of the study to the audience and then asked them to complete the pre-seminar questionnaire. After completion, we collected the pre-seminar answer sheets before the seminar began. The participants retained the post-seminar answer sheets during the seminar. Those who refused to answer the questionnaire were deemed to have dropped out of the study, but they could still attend the seminar if they wished.

Educational intervention

The seminar was 1 h in duration and comprised two

lectures: “criminal responsibility” and “forensic psychiatric treatment.” For each seminar, a leading psychiatrist with a judgment physician license gave a presentation. In the first lecture, the lecturer explained how the concept of criminal responsibility was interpreted in Japanese legislation. Next, he explained the mechanisms through which mental disorders can be a cause of behaviors that harm others. An outline of the psychiatric evaluation of an MDO was then introduced. In the second lecture, another lecturer began by introducing the designated medical facility. He also presented the content of the treatment program provided in the facilities. Finally, data regarding the outcome of special treatment for MDOs were shared. After each lecture, the presenters answered questions from the participants.

Post-seminar survey

After the seminar concluded, we asked the attendees to answer the post-seminar questionnaire. Sections 1-3 from the pre-seminar questionnaire were included in the post-seminar survey; section 4 was omitted. Upon completion, we collected the answer sheets.

Ethical issues

This survey focused only on the opinions of individuals and did not deal with any patients. We gathered no personal information from the participants. The return of the questionnaires was deemed to indicate consent to participate in this anonymous survey. We registered this study with the Clinical Trials Registry of the University Hospital Medical Information Network (UMIN, Tokyo, Japan) with the unique trial number UMIN000015725.

Statistical analysis

We counted the questionnaire sheets returned to calculate the response rate. We then compiled the ratings for each item of the pre-seminar questionnaire. Furthermore, we examined the correlations between each item regarding knowledge and opinions (in sections 1, 2 and 3) and the demographic data collected on respondents (in section 4) using a chi-square test.

We also examined the change in participants' opinions about forensic mental health. Using the serial numbers on the answer sheets, we identified which sheets were paired. In these comparisons, pairs missing either pre-seminar or post-seminar responses were excluded from the analysis. The pairs for each item were statistically analyzed using a two-tailed Wilcoxon signed-rank test.

We then applied a logistic regression analysis to our data to identify factors predicting the plasticity of opinions on criminal responsibility. To conduct this analysis, we categorized the participants into two groups: (1) those whose pre-seminar opinion on criminal responsibility became more supportive; and (2) those whose opinion did not change or who became less supportive. This binary variable was set as the dependent variable, and all other items answered in

the pre-seminar questionnaire were set as independent variables. Cases with missing data on opinions toward criminal responsibility either pre- or post-seminar were excluded from this analysis. We applied a logistic regression analysis using the forward stepwise (Wald) method.

The collected data were analyzed using IBM SPSS Statistics for Windows, Version 22.0 (IBM Corp., Armonk, NY, United States). We set the level of significance at $P < 0.05$ before conducting the analyses.

RESULTS

Of the 86 people attending the seminar, 78 (91%) answered at least one item in the questionnaire, of which 69 people completed the both pre- and post-questionnaire. We included all 78 answers in the initial analysis. The number of valid answers in each item is described in each table.

The largest age group was those aged 50-59 years, with only four attendees aged over 60 years. Thirty-seven (47%) attendees were men, and 48 (62%) were neither medical practitioners nor medical students.

In the pre-seminar questionnaire, only half ($n = 39$) of the respondents stated they had previously heard the term “forensic psychiatry,” and 48 (62%) had no knowledge of the contents of the MHW Act. In contrast, 74 (95%) respondents had previously heard the term “criminal responsibility.” Furthermore, 53 (68%) respondents did not know about the introduction of the MTS Act, compared with 63 (81%) who were aware of the Lay Judge Act coming into force.

In the pre-seminar questionnaire, 37 (47%) and 35 (45%) respondents definitely agreed with the concept of official involuntary hospitalization (OIH) and the MTS Act, respectively. In contrast, only 13 (17%) had a positive attitude (“definitely agree” or “relatively agree”) toward the concept of criminal responsibility, and 37 (47%) were against it (“relatively disagree” or “definitely disagree”). Regarding the Lay Judge Act, 34 (43%) had a favorable opinion, whereas 17 (22%) had a negative one. The responses reflected varied opportunities for exposure to media reports on psychiatry, while 59 (76%) participants believed that the media should report more frequently on mental health issues. The majority (55%) of participants answered that they had seen more recent media reports regarding the relationship between psychiatry and crime than in the past, and 45 (58%) believed that the media should intensify the frequency of reports explaining this topic. Opinions regarding anonymous reporting about suspects with mental disorders were split. These results are presented in Table 2.

We compared the results of the answers between the pre- and post-seminar questionnaires in the pre- and post-pairs ($n = 66$). More respondents had a positive opinion regarding the concept of criminal responsibility after the seminar than before (Wilcoxon

Table 2 Pre-seminar opinions of respondents regarding forensic mental health issues

Question	Answer	Number
Have you heard the term "Forensic psychiatry?"	Yes	39 (50%)
	No	39 (50%)
Do you know the content of the MHW Act?	Know in detail	11 (14%)
	A little	19 (24%)
	No	48 (62%)
Have you heard the concept of criminal responsibility?	Yes	74 (95%)
	No	4 (5%)
Did you know about the introduction of the MTS act?	Yes	25 (32%)
	No	53 (68%)
Did you know about the introduction of the Lay Judge Act?	Yes	63 (81%)
	No	15 (19%)
Opinion toward OIH	Definitely agree	37 (47%)
	Relatively agree	24 (31%)
	Neutral	12 (15%)
	Relatively disagree	0
	Definitely disagree	1 (1%)
	No answer	4 (5%)
Opinion toward the concept of criminal responsibility	Definitely agree	6 (8%)
	Relatively agree	7 (9%)
	Neutral	19 (24%)
	Relatively disagree	23 (29%)
	Definitely disagree	14 (18%)
	No answer	9 (12%)
Opinion toward the MTS Act	Definitely agree	35 (45%)
	Relatively agree	23 (29%)
	Neutral	12 (15%)
	Relatively disagree	3 (4%)
	Definitely disagree	2 (3%)
	No answer	3 (4%)
Opinion toward the Lay Judge Act	Definitely agree	12 (15%)
	Relatively agree	22 (28%)
	Neutral	24 (31%)
	Relatively disagree	9 (12%)
	Definitely disagree	8 (10%)
	No answer	11 (14%)
Opportunity to see media reports regarding psychiatry	Many	8 (10%)
	Relatively many	19 (24%)
	Neutral	11 (14%)
	Relatively few	18 (23%)
	Few	22 (28%)
Opinion toward the optimal frequency of media reports regarding psychiatry	More than now	59 (76%)
	Neutral	17 (22%)
	Less than now	1 (1%)
	No answer	1 (1%)
Opportunity to see media reports about the relationship between psychiatry and crimes	Increased	43 (55%)
	No change	32 (41%)
	Decreased	3 (4%)
Opinion toward the optimal frequency of media reports regarding the relationship between psychiatry and crimes	More than now	45 (58%)
	Neutral	30 (38%)
	Less than now	2 (3%)
	No answer	1 (1%)
Should the media maintain anonymity in reporting crime cases with mental disorders?	Definitely agree	11 (14%)
	Relatively agree	17 (22%)
	Neutral	27 (35%)
	Relatively disagree	13 (17%)
	Definitely disagree	10 (13%)

MHW Act: Mental Health and Welfare Act; MTS Act: Medical Treatment and Supervision Act; OIH: Official Involuntary Hospitalization.

signed-rank test, $Z = -3.6758$, $P < 0.001$). In addition, respondents' opinions toward OIH (Wilcoxon signed-rank test, $Z = -2.017$, $P = 0.044$) and the Lay Judge Act (Wilcoxon signed-rank test, $Z = -2.467$, $P = 0.014$) were also changed to be more favorable. No significant differences between pre- and post-seminar

were detected for opinions toward the MTS Act (Wilcoxon signed-rank test, $Z = -0.498$, $P = 0.619$). Compared with pre-seminar attitudes, the post-seminar questionnaire answers showed that more respondents wanted to see more frequent media reports on the relationship between psychiatry and crimes (Wilcoxon

Table 3 Changes in opinions on psychiatry: Pre- and post-seminar

Question	Answer	Pre	Post	Stat ¹
Opinion toward OIH (<i>n</i> = 66)	Agree	33 ²	38 ²	<i>Z</i> = -2.017
	Relatively agree	21 ²	23	<i>P</i> = 0.044
	Neutral	11	4	
	Relatively disagree	0	1	
	Disagree	1	0	
Opinion toward the concept of criminal responsibility (<i>n</i> = 60)	Agree	5	9	<i>Z</i> = -3.797
	Relatively agree	6	13	<i>P</i> < 0.001
	Neutral	18	18 ²	
	Relatively disagree	19 ²	13	
	Disagree	12	7	
Opinion toward the MTS Act (<i>n</i> = 66)	Agree	32	29	<i>Z</i> = -0.498
	Relatively agree	19 ²	26 ²	<i>P</i> = 0.619
	Neutral	10	7	
	Relatively disagree	3	3	
	Disagree	2	1	
Opinion toward the Lay Judge Act (<i>n</i> = 66)	Agree	9	15	<i>Z</i> = -2.463
	Relatively agree	19	18 ²	<i>P</i> = 0.014
	Neutral	22 ²	21 ²	
	Relatively disagree	9	5	
	Disagree	7	7	
Should the media report more frequently on psychiatry? (<i>n</i> = 69)	Agree	54 ²	49 ²	<i>Z</i> = 1.291
	Neutral	14	19	<i>P</i> = 0.197
	Disagree	1	1	
Should media report more frequently on the relationship between psychiatry and crimes? (<i>n</i> = 69)	Agree	41 ²	51 ²	<i>Z</i> = -3.051
	Neutral	26	17	<i>P</i> = 0.02
	Disagree	2	1	
Should the media maintain anonymity in reporting crime cases with mental disorders? (<i>n</i> = 68)	Agree	9	11	<i>Z</i> = -2.185
	Relatively agree	15	17	<i>P</i> = 0.029
	Neutral	22 ²	25 ²	
	Relatively disagree	12	7	
	Disagree	10	8	

¹Two-tailed Wilcoxon signed-rank test; ²The median for each item is indicated by underscoring. MHW Act: Mental Health and Welfare Act; MTS Act: Medical Treatment and Supervision Act; OIH: Official Involuntary Hospitalization.

signed-rank test, *Z* = -3.051, *P* = 0.02), and more respondents had a positive opinion concerning the anonymous reporting of suspects with mental disorders (Wilcoxon signed-rank test, *Z* = -2.185, *P* = 0.029). No significant changes were detected regarding the level of reporting on psychiatry (Table 3).

The logistic regression analysis with the forward stepwise (Wald) method showed two independent variables as being associated with the positive change of opinion toward the concept of criminal responsibility: "opinion toward the MTS Act" [coefficient (*B*) = -0.540, odds ratio = 0.583, 95%CI: 0.341-0.997, *P* < 0.05] and "opportunity to see media reports regarding psychiatry" [coefficient (*B*) = -0.394, odds ratio = 0.674, 95%CI: 0.456-0.997, *P* < 0.05]. Thus, participants who were not supportive of the MTS Act before the seminar and those who had fewer opportunities to see media reports regarding psychiatry were more likely to become more supportive of criminal responsibility after attending the seminar.

DISCUSSION

In this study, we conducted a questionnaire survey

regarding forensic mental health with two key aims. First, we identified participants' level of awareness and opinions about the current situation of forensic mental health in Japan. Second, we examined the possibility of changing participants' opinions *via* a 1-h educational intervention, based on our hypothesis that citizens' opposition to the concept of criminal responsibility derives from a lack of knowledge on forensic mental health.

The participants of the present study were voluntary seminar attendees. Thus, it is likely that most were interested in or at least curious about psychiatry. Nevertheless, only half of the participants had previously heard the term "forensic psychiatry." In addition, the majority of participants had no knowledge of either the MTS or MHW Act. These results show that the participants did not have even a superficial knowledge of forensic mental health. In contrast, most of the participants had previously heard the term "criminal responsibility." This might be because the mass media sometimes reports cases in which criminal responsibility is questioned^[14]. However, the depth of the participants' understanding about criminal responsibility was uncertain. It is possible that Japanese citizens' knowledge

about forensic mental health is very limited.

Very few studies similar to ours have been performed in Japan. Ando *et al.*^[15] conducted a mail survey of 3000 citizens to investigate their knowledge regarding forensic systems. In that study, respondents had a good knowledge of psychiatric testimony, but the majority had little awareness of the MTS Act. These results are consistent with our findings.

In contrast, citizens' recognition of the Lay Judge Act has been repeatedly investigated by both government^[16] and media organizations^[17,18]. Previous studies suggest that over 90% of citizens are aware of the enactment of the Lay Judge Act. The percentage is higher than that found in the present study; however, it is highly likely that the Lay Judge Act is better known than the MTS and MHW Acts. This fact may reflect a lack of clarity among citizens about mental health in Japan.

In 2010, we conducted a survey of psychiatric outpatients using a questionnaire with content similar to the questionnaire used in the present study^[8]. In the 2010 survey, 86.7% of patients and 91.4% of their families had previously heard of the term "criminal responsibility." We found a similar percentage in the present study. The participants in this study, as well as psychiatric outpatients and their families, can be considered to be more concerned about forensic mental health than are citizens in general. Therefore, we consider the degree of awareness of forensic mental health among the public to be lower than these results.

In this study, approximately 60% of respondents opposed the concept of criminal responsibility before the seminar. Considering the small sample size and convenience sampling method of this study, it is difficult to generalize this result. However, to date no other structured research evaluating the national opinion on this concept has been reported^[8]. A nationwide survey with non-biased samples is required to certify our result.

It is possible that more than a few citizens consider it unfair that patients with mental disorders are not deemed criminally responsible (partially influenced by media reports), although it is very rare that an insanity defense is successful in court^[6]. Indeed, some researchers insist on abolishing the concept of criminal responsibility because it is seen as a form of discrimination^[19]. However, in the post-seminar questionnaire, we saw a statistically significant increase in the number of respondents who were supportive of the concept of criminal responsibility, and these supporters became the majority group. Thus, a considerable proportion of the audience changed their opinions regarding criminal responsibility after attending the 1-h seminar.

In other words, some people originally opposed to the concept of criminal responsibility may have simply lacked a good understanding of mental disorders and forensic mental health systems. This hypothesis is consistent with the finding from the logistic regression analysis that participants with fewer opportunities to see media reports on psychiatry were more likely to

become more positive toward the concept of criminal responsibility after the educational intervention.

It is noteworthy that participants who were unsupportive of the MTS Act tended to change their opinion, becoming more supportive of criminal responsibility. It is hypothesized that those who previously held a negative view of forensic psychiatric treatment changed their attitude after gaining knowledge on forensic mental health, resulting in a more positive attitude about the concept of criminal responsibility.

In contrast, the majority of respondents were supportive of OIH and the MTS Act before the seminar. After the seminar, the proportion of supporters increased; this increase was statistically significant for OIH but not for the MTS Act. These results suggest that a challenge remains regarding how to teach citizens about special treatment for MDOs. This seminar did not include case presentations of MDOs. Exposure to patients with mental disorders in a clinical setting is considered beneficial in reducing stigma against mental illnesses^[20]. However, it is technically and ethically difficult to organize a session in which citizens can interact with MDOs. A case presentation with a realistic atmosphere that enables audiences to imagine an MDO and their process of recovery is desirable to maximize the effect of seminars.

We found that after the seminar, more respondents were willing to be exposed to media reports regarding the relationship between psychiatry and crime. This increase was statistically significant and may indicate motivation on the part of the participants to learn about forensic mental health.

There is some debate as to whether the media should report criminal cases and name the alleged offender when he or she may suffer from a mental disorder. Traditionally, Japanese media have maintained anonymity in such cases. In this study, the number of respondents supporting this kind of anonymous reporting increased following the seminar. This suggests that a considerable number of participants considered the risks of naming alleged offenders suspected to suffer from a mental disorder.

Regarding study limitations, this study was a non-controlled trial. The participants, recruited through convenience sampling, may have already been motivated and interested in our lecture. Thus, it is unclear to what level the general population understands forensic psychiatry and how rigid their opinions against forensic mental health are. However, it seems unfeasible to force citizens who are indifferent to this issue to attend the seminar. Further studies should be conducted using larger and less biased samples to achieve more precise results. Additionally, randomized controlled trials are needed to evaluate the power of influencing the opinions of attendees with more precision. For example, an interventional trial in school settings with cluster sampling may contribute to confirming our hypotheses.

General discrimination against patients with mental disorders still exists in Japan. People in Japan have a

stronger tendency to judge patients with schizophrenia as unfamiliar and risky to the community than people in the United Kingdom^[10] or the United States^[21]. These results indicate the necessity of education not only on forensic mental health but also regarding general psychiatry.

In conclusion, in Japan, the enactment of the MTS Act and the Lay Judge Act opened a door to a new age for forensic mental health. The MTS Act aims for the early reintegration of MDOs into the community, and the Lay Judge Act provides greater opportunities for citizens to be involved in criminal trials in Japan, many of which involve MDOs. However, the level of concern of citizens about forensic mental health still appears to be low. Even among participants attending our seminar about forensic mental health, many knew very little about the legislation concerning MDOs. Additionally, the present study shows that the majority of citizens seem unsupportive of the concept of criminal responsibility. However, the results demonstrated the possibility that an educational intervention can change the opinions of citizens regarding these issues. After providing the participants with proper information and knowledge, they became more supportive of the concept of criminal responsibility, admitting the necessity of proper treatment for MDOs with NGRI rather than harsh punishment. This result is consistent with our hypothesis that a lack of knowledge about forensic mental health is associated with unsympathetic attitudes toward MDOs. As mentioned above, however, there are several elements that should be examined to confirm our hypothesis. A national survey with larger and non-biased samples is required to fully clarify public opinion toward forensic mental health. Interventional studies should employ random sampling methods to identify the exact effect of such seminars. The longitudinal effect of the intervention also needs to be examined with a follow-up session. Controlled trials will be beneficial to specify which elements are essential to help attendees alter their opinions. In terms of research settings, schools can be advantageous because of the availability of homogeneous subjects and participants' readiness to attend seminars. The content of these seminars should include case presentations.

COMMENTS

Background

There is scarce evidence regarding citizens' attitude to forensic mental health in Japan. Also, discrimination toward mentally disordered offenders seems to be strong in many countries.

Research frontiers

The authors provided a one-hour seminar to offer precise knowledge about forensic mental health to citizens. This kind of attempt is very rare in Japan.

Innovations and breakthroughs

The results suggest people's biased recognition about mentally disordered offenders will be amended by brief educational intervention. It means that providing precise knowledge can reduce citizens' discrimination toward mental

disorders.

Applications

Educational intervention to citizens will be effective for constructing a collaborative society. Developing a series of seminar in school education is also promising.

Terminology

Mentally disordered offenders mean people who violated a law at least partially due to their psychiatric symptoms such as delusion. How to deal with them is a crucial issue for secure and effective community.

Peer-review

This is a very interesting manuscript aimed to identify participants' level of awareness and opinion about the current situation of forensic mental health in Japan, and how it can be changed through psychoeducation. Although the manuscript uses simple methodology, the results may have an important impact on negative attitudes and stigma towards mentally ill persons and mentally ill offenders. This kind of research should be encouraged.

REFERENCES

- 1 Allnutt S, Samuels A, O'driscoll C. The insanity defence: from wild beasts to M'Naghten. *Australas Psychiatry* 2007; **15**: 292-298 [PMID: 17612881 DOI: 10.1080/10398560701352181]
- 2 Nakatani Y, Kojimoto M, Matsubara S, Takayanagi I. New legislation for offenders with mental disorders in Japan. *Int J Law Psychiatry* 2010; **33**: 7-12 [PMID: 19906429 DOI: 10.1016/j.ijlp.2009.10.005]
- 3 Petrella RC, Benedek EP, Bank SC, Packer IK. Examining the application of the guilty but mentally ill verdict in Michigan. *Hosp Community Psychiatry* 1985; **36**: 254-259 [PMID: 3979974]
- 4 Tietze T. The Breivik controversy: politics, terrorism and psychiatry. *Australas Psychiatry* 2014; **22**: 383-385 [PMID: 24913661 DOI: 10.1177/1039856214537127]
- 5 Ogloff JR, Roesch R, Eaves D. International perspective on forensic mental health systems. *Int J Law Psychiatry* 2000; **23**: 429-431 [PMID: 11143942]
- 6 Every-Palmer S, Brink J, Chern TP, Choi WK, Hem-Yee JG, Green B, Heffernan E, Johnson SB, Kachaeva M, Shiina A, Walker D, Wu K, Wang X, Mellsop G. Review of psychiatric services to mentally disordered offenders around the Pacific Rim. *Asia Pac Psychiatry* 2014; **6**: 1-17 [PMID: 24249353 DOI: 10.1111/appy.12109]
- 7 Nakatani Y. Psychiatry and the law in Japan. History and current topics. *Int J Law Psychiatry* 2000; **23**: 589-604 [PMID: 11143956]
- 8 Shiina A, Igarashi Y, Iyo M. A survey of concern about forensic psychiatry in users of mental health care (in Japanese). *Jap J Forensic Psychiatry* 2014; **9**: 2-13
- 9 Griffiths KM, Nakane Y, Christensen H, Yoshioka K, Jorm AF, Nakane H. Stigma in response to mental disorders: a comparison of Australia and Japan. *BMC Psychiatry* 2006; **6**: 21 [PMID: 16716231 DOI: 10.1186/1471-244X-6-21]
- 10 Furnham A, Murao M. A cross-cultural comparison of British and Japanese lay theories of schizophrenia. *Int J Soc Psychiatry* 2000; **46**: 4-20 [PMID: 14529075 DOI: 10.1177/002076400004600103]
- 11 Laurence M. Criminal Psychology: Nature, Nurture, Culture. USA: Charles C Thomas Pub Ltd. 2012: p25
- 12 Mino Y, Yasuda N, Tsuda T, Shimodera S. Effects of a one-hour educational program on medical students' attitudes to mental illness. *Psychiatry Clin Neurosci* 2001; **55**: 501-507 [PMID: 11555346 DOI: 10.1046/j.1440-1819.2001.00896.x]
- 13 Science Council in Japan. A report of psychiatric research community: Toward the mental barrier-free aiming at the spread of precise knowledge of mental disorders (in Japanese). Japan: Science Council in Japan, 2005
- 14 Hara S. Seishin-shougai to houdou. Media ha naze machigaeru noka. [Mental Disorders and the Media - Why the media make a mistake?] (in Japanese). *J Japan Occupational Therapy Association* 2004; **23**:

- 513-521
- 15 **Ando K.** Shihou-seido no ninchido ni kansuru shakai ishiki chousa. [A Social Survey Regarding the Awareness of Legal Scheme] (in Japanese). *Jap J Forensic Psychiatry* 2008; **4**: 118-119
- 16 **Supreme Court.** Saibanin-seido no unyou ni kansuru ishiki chousa. [A Public Opinion Poll Regarding the management of the Lay Judge Act] (in Japanese), 2010. Available from: URL: http://www.saibanin.courts.go.jp/vcms_1f/h24_isiki_1.pdf
- 17 **Sakai Y.** Saibanin-seido. Kokumin no ishiki to kadai. "Saibanin seido ni kansuru yoron-chousa" kara. [Saibanin-seido. National Opinion and Challenge] (in Japanese). *The NHK Monthly Report on Broadcast Research* 2009; **3**: 24-33
- 18 **Minaminihonshimbun.** "Saibanin" Sanpi ga kikkou shoukyokuha ga izen 8 wari. [Saibanin - competing opinions, 80% are still reluctant] (in Japanese). Article in Newspaper published on May 17, 2010
- 19 **Sato N.** Keihou 39 joh ha hontou ni hitsuyou nanoka. [Do we really need Article 39 of Penal Code?] (in Japanese). *Jap J Forensic Psychiatry* 2008; **3**: 101-106
- 20 **Drolen CS.** The effect of educational setting on student opinions of mental illness. *Community Ment Health J* 1993; **29**: 223-234 [PMID: 8375132]
- 21 **Richards M,** Hori H, Sartorius N, Kunugi H. Cross-cultural comparisons of attitudes toward schizophrenia amongst the general population and physicians: a series of web-based surveys in Japan and the United States. *Psychiatry Res* 2014; **215**: 300-307 [PMID: 24374117 DOI: 10.1016/j.psychres.2013.12.012]

P- Reviewer: Orellana AF, Seeman MV **S- Editor:** Kong JX

L- Editor: A **E- Editor:** Lu YJ





Published by **Baishideng Publishing Group Inc**
7901 Stoneridge Drive, Suite 501, Pleasanton, CA 94588, USA
Telephone: +1-925-223-8242
Fax: +1-925-223-8243
E-mail: bpgoffice@wjgnet.com
Help Desk: <http://www.f6publishing.com/helpdesk>
<http://www.wjgnet.com>

