

Effects of Renaming Schizophrenia in Korea: from "Split-Mind Disorder" to "Attunement Disorder"

Jang Won Cho¹, Eun-Young Jang², Hyung-Jin Woo³, Yong Chon Park¹, Seok Hyun Kim¹, Kyung Sue Hong⁴, Yu Sang Lee^{5 ⊠}, and Jun Soo Kwon⁶

Objective Korean Neuropsychiatric Association changed the Korean name of schizophrenia from 'Split-mind Disorder' to 'Attunement Disorder' in 2012. This study assessed attitudes towards the renaming of schizophrenia among mental health practitioners (n=440), patients with schizophrenia and their guardians (n=396), and the university students (n=140) using self-administered questionnaires.

Methods The questionnaire included items related to participants' perception of the renaming of the disease, the nature of informing about the disease to confirm the effect of the name change.

Results It was confirmed the notification rate of disease name by mental health practitioners was increased significantly after the renaming. Among patients and their guardians, 24.9% and 15.0%, respectively, perceived their own or the family member's illness as 'attun-

Conclusion Patients and their guardians continue to display a low awareness about the name of the disease as 'attunement disorder.' However, mental health practitioners were found to be able to easily use the name 'attunement disorder' as a result of the increased notification rate of the new disease name. Psychiatry Investig 2018;15(7):656-662

Key Words Schizophrenia, Renaming, Stigma.

INTRODUCTION

In January 2012, Korean Neuropsychiatric Association revised the Korean name for schizophrenia from 'split-mind disorder' to 'attunement disorder'. In some East Asian countries, including Korea and Japan, schizophrenia, which is derived from the Greek words 'skhizein' and 'phren,' was literally translated into 'split-mind disorder', to indicate the 'illness in which one cannot properly function due to the splitting of the mind'. However, this term was attached to high social stigma.¹⁻³ These stigmatizing effects were also present in the mass

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☑ Correspondence: Yu Sang Lee, MD, PhD

Department of Psychiatry, Yongin Mental Hospital, 940 Joongbu-daero, Giheung-gu, Yongin 17089, Korea

Tel: +82-31-288-0114, Fax: +82-31-288-0180, E-mail: yusanglee@gmail.com

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media. An examination of attitudes presented in articles on the psychiatric disorder in major daily newspapers revealed that more articles were written from a negative perspective than from a positive or neutral one. In addition, more than 10% of the articles used terms related to psychosis or split-mind disorder to disparage or criticize opponents, or used them metaphorically, in a way unrelated to the disease. 4,5 These stigmatizing effects were the main reason Korean mental health professionals were reluctant to use the name of the disorder when informing patients and their guardians about it.

In 2008, Park and Chung⁶ conducted a study of 150 mental health practitioners before the renaming the disease, and they found that the most common reason for not informing patients and guardians about the disease name was that 'the term connotes a negative meaning' (37.9%), followed by 'the patient may have unintentional misunderstandings' (34.5%). This can be interpreted as the effect of the prejudice and stigma about the disease name. Educating and informing a schizophrenia patient of the disease name will help recognize the im-

¹Department of Psychiatry, College of Medicine, Hanyang University, Seoul, Republic of Korea

²Department of Counseling Psychology, Honam University, Gwangju, Republic of Korea

³Department of Journalism & Mass Communication, Hanyang University, Seoul, Republic of Korea

⁴Department of Psychiatry, Sungkyunkwan University School of Medicine, Samsung Medical Center, Seoul, Republic of Korea

⁵Department of Psychiatry, Yong-In Mental Hospital, Yongin, Republic of Korea

⁶Department of Psychiatry, College of Medicine, Seoul National University, Seoul, Republic of Korea

portance of treatment and will affect attitudes toward medication. However, the social stigmatization of schizophrenia is likely to delay appropriate treatment, which, in turn, can negatively affect treatment outcomes by prolonging the duration of untreated psychosis.8

Korean Neuropsychiatric Association changed the original Korean term for schizophrenia, 'Jungshinbunyeolbyung' (split-mind disorder) to 'Johyeonbyung' (attunement disorder). Johyeon literally means 'to tune a stringed musical instrument'. In the context of schizophrenia, attunement is a metaphor used for tuning the strings of the mind.^{1,2}

This new term emphasizes on the positive notion that recovery is possible with proper treatment (tuning) such as medication, psychotherapy, or rehabilitation. Mental health users and professionals around the world have claimed that renaming schizophrenia is necessary because of the prejudice and stigma about the disease name, and in some countries they have renamed schizophrenia.^{3,9,10} According to Yamaguchi et al's9 review published in 2017, in Japan, there has been in increase in the notification rate of the disease name after such renaming, and it has been observed that the society has become interested in the stigma related to mental illness. In contrast, a study conducted in Hong Kong revealed that the new name did not cause a change in the attitudes toward schizophrenia patients. Evidently, opinions about the possibility of resolving stigma through renaming the disorder are still inconsistent. 11,12 Therefore, it is necessary to identify the level of awareness about the renaming and to confirm its effects in Korea, since the renaming of the disease in 2012. To this end, the present study was conducted to confirm the effect of renaming schizophrenia in Korea, to use this basic data for establishing future mental health measures.

METHODS

We conducted a survey using self-administered questionnaires with cross-sectional design.

The questionnaire for the mental health practitioners was administered to 203 doctors recruited from the Korean Neuropsychiatric Association (70 psychiatrists, 128 psychiatric residents, 5 psychiatric doctors who did not disclose their identity), 118 nurses working in the mental health and outpatient wards, 63 social workers, and 56 clinical psychologists, from April to December 2015. The questionnaire for patients and their guardians was administered to 396 patients who were being treated for schizophrenia, and their guardians, from September to December 2015. The patients and their guardians responded the questionnaire after being provided with sufficient information about this study from their attending psychiatrists. The questionnaire for the university students was administered to 140 college students from March to April 2016. The university students were attending the department of journalism and mass communication at one university.

The questionnaires were developed by the authors according to the target subjects. The questionnaire for mental health practitioners consisted of 16 questions including a question on the awareness of the renaming and a question examining the effect of the renaming on the notification rate of the disease name. The questionnaire for patients and guardians, which was different from that used with mental health practitioners, consisted of 18 questions pertaining to the awareness of the renaming, the notification rate of the disease name, and the name of the disease. A question on the awareness of 'attunement disorder' was added along with a question on the awareness of the name change to the questionnaire for the university students, which consisted of 17 questions. This study was approved by the Research Ethics Review Committee of Yongin Mental Hospital (2015-35) and Hanyang University Hospital (2015-06-015, 2015-06-012).

We used the chi-square test to identify the changes of the notification rate of disease name by mental health practitioners and the disease name recognition of patients and their families before and after the renaming schizophrenia. Statistical significance was defined as p<0.05, and a two-sided test was performed. The statistical analysis was performed using the Statistical Package for the Social Sciences (version 18.0; SPSS Inc., Chicago, IL, USA).

RESULTS

Demographics

In total, 48.6% of the psychiatrists, 100% of the psychiatric residents, 60.2% of the nurses, 61.9% of the social workers, and 51.8% of the clinical psychologists had less than 5 years of experiences. The mean length of patients' treatment was 15.5 years, and the mean length of treatment for patients under the protection of a guardian was 11.7 years. Further, 14.3% of the subjects from the general population answered that they had visited mental health-related institutions in the past (Table 1).

Attitude toward and awareness of the renaming of schizophrenia

Among the subjects, 92.8% of the psychiatrists, 94.5% of the psychiatric residents, 94.9% of the nurses, 95.2% of the social workers, 78.6% of the clinical psychologists, 69.3% of the patients, 76.6% of the guardians, and 50.0% of the general population agreed with the need for renaming split-mind disorder to attunement disorder. Further, 69.6% of the psychiatrists, 71.8% of the psychiatric residents, 74.3% of the nurses, 69.9% of the social workers, and 67.9% of the clinical

Table 1. Demographic characteristics in mental health workers, patients, patients' guardians, and the university students

			Mental	I health workers			Patie	Patients and patients' guardians	ians	University
	Psychiatrist	Resident	Nurse	Social worker	Clinical psychologist	p-value*	Patients	Patients' guardians	p-value*	students
Age (years), mean±SD	nean±SD									
	40.9 ± 9.2	30.5 ± 2.9	32.2 ± 9.1	33.5 ± 5.6	30.1 ± 4.9	<0.001	46.7 ± 11.4	51.0 ± 14.4	0.002	22.0 ± 3.3
Sex, N (%)										
Male	43 (61.4)	77 (60.2)	7 (6.0)	2 (3.6)	8 (12.7)	<0.001	95 (44.6)	59 (37.8)	0.192	62 (44.3)
Female	27 (38.6)	51 (39.8)	109 (94.0)	54 (96.4)	55 (87.3)		118 (55.4)	97 (62.2)		78 (55.7)
Length of care	Length of career (years), N (%)									
<>> 5>	34 (48.6)	128 (100)	71 (60.2)	29 (51.8)	39 (61.9)	<0.001				
5-10	6 (8.6)	0.00)	24 (20.3)	16 (28.6)	16 (25.4)					
10-20	16 (22.9)	0.000	10(8.5)	11 (19.6)	6 (9.5)					
20–30	11 (15.7)	0.000	12 (10.2)	6 (9.5)	2 (3.2)					
30≤	3 (4.3)	0.00) 0	1 (0.8)	0 (0.0)	0 (0.0)					
Length of trea	Length of treatment (years), mean±SD	an±SD					15.5 ± 10.5	11.7 ± 10.4	0.010	
Experience of	Experience of visiting a mental health-related institutions	health-related is	nstitutions							
Yes, N (%)										20 (14.3)
No, N (%)										119 (85.0)

^{*}the chi-square test or an ANOVA was used, as appropriate. SD: standard deviation

Table 2. Mental health workers', patients', patients' guardians', and the university students' attitude toward and awareness of the renaming schizophrenia

			Mer	Mental health workers			Pat	Patients and patients' guardians	lians	University
•	Psychiatrist	Resident	Nurse	Social worker	Clinical psychologist	p-value*	Patients	Patients' guardians	p-value*	students
Awareness of	renaming schi	zophrenia (Do 3	you know the na	ame of schizophreni	Awareness of renaming schizophrenia (Do you know the name of schizophrenia has been changed?)					
Yes, N (%)	(100)	Yes, N (%) 69 (100) 128 (100) 116 (98.3)	116 (98.3)	63 (100)	55 (98.2)	0.340	132 (60.6)	79 (49.4)	0.031	23 (16.5)
No, N(%) 0 (0)	0 (0)	0 (0)	2 (1.7)	0 (0)	1 (1.8)		86 (39.4)	81 (50.6)		116 (83.5)
Agreement to	ward renaming	gschizophrenia	(Do you agree	Agreement toward renaming schizophrenia (Do you agree with the renaming schizophrenia?)	chizophrenia?)					
Yes, N (%)	64 (92.8)	Yes, N (%) 64 (92.8) 121 (94.5)	112 (94.9)	60 (95.2)	44 (78.6)	0.01	147 (69.3)	121 (76.6)	0.123	70 (50.0)
No, N (%) 5 (7.2)	5 (7.2)	7 (5.5)	6 (5.1)	3 (4.8)	12 (21.4)		65 (30.7)	37 (23.4)		70 (50.0)
Renaming sch	izophrenia cai	anot resolve stig	gma (Do you thi	ink the renaming scl	Renaming schizophrenia cannot resolve stigma (Do you think the renaming schizophrenia cannot resolve stigma?)	stigma?)				
Yes, N (%)	48 (69.6)	Yes, N (%) 48 (69.6) 92 (71.8)	87 (74.3)	44 (69.9)	38 (67.9)	0.902				
No, N (%)	No, N (%) 21 (30.4)	36 (28.2)	30 (25.7)	19 (30.1)	18 (32.1)					
Awareness of 1	the meaning or	f Johyeonbyung	(Attunement D	Disorder) (Do you ki	Awareness of the meaning of Johyeonbyung (Attunement Disorder) (Do you know the meaning of Johyeonbyung (Attunement Disorder)	nbyung (Attu	nement Disord	er)		
Yes, N (%)							67 (31.0)	45 (28.3)	0.570	
No, N (%)							149 (69.0)	114 (71.7)		
Possibility of r	educing stigm	a (Do you think	the renaming	Possibility of reducing stigma (Do you think the renaming schizophrenia can reduce stigma?)	educe stigma?)					
Yes, N (%)										87 (62.6)

^{*}the chi-square test was used. SD: standard deviation

No, N (%)

52 (37.4)

psychologists answered that they agreed with some research results that 'renaming schizophrenia cannot resolve the stigma. Among the patients and their guardians, 31.0% and 28.3%, respectively, knew the meaning of attunement disorder. Eighty-seven (62.1%) respondents from the general population answered that the renaming of the disease would reduce hostility towards schizophrenia (Table 2).

Effects of renaming

When mental health practitioners were asked whether they used the term split-mind disorder before the renaming and attunement disorder after the renaming, to inform the patient and his/her guardian of the disease, 68.6% and 88.6% of psychiatrists answered 'yes', respectively (p=0.004). Specifically, 75.4% and 95.3% of the psychiatric residents answered 'ves', respectively (p<0.001); while 87.3% and 96.8% of the social workers answered 'yes', respectively (p=0.048), demonstrating a statistically significant difference between the usage of the terms before and after the renaming (Figure 1).

Regarding the reason for not using the term 'attunement disorder' to inform patients and their guardians about the disease, 50.6% of the 170 respondents reported 'familiarity with the old term (split-mind disorder). As for the reason for continuing to use the old name, 'split-mind disorder', with patients and their guardians, and 70.3% of the 182 respondents answered 'familiarity with the old term (split-mind disorder)' (Figure 2).

When asked whether they were aware of the diagnosis name, 75.5% of the patients and 68.2% of the guardians answered

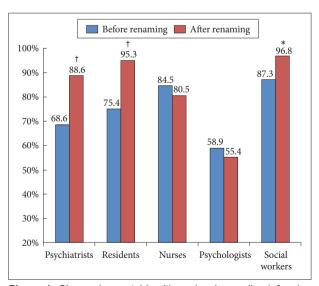


Figure 1. Change in mental health workers' regarding informing about the diagnosis after renaming schizophrenia. Before renaming: did you inform patients or their guardians of the exact diagnosis (split-mind disorder) before it was renamed?. After renaming: do you inform patients or their guardians of the exact diagnosis (attunement disorder) after it has been renamed?. *p<0.05, †p<0.001.

'yes'. When asked an open-ended question about the name of the illness, 48.9% of the patients and 32.9% of the guardians used the term 'attunement disorder', while 33.6% of the patients and 53.4% of the guardians used the term 'split-mind disorder' (Figure 3).

When asked 'whether the doctor used split-mind disorder as the diagnosis name prior to the renaming' and 'whether the doctor used attunement disorder as the diagnosis name after the renaming, 55.5% and 40.8% of the patients answered 'yes', respectively (p=0.002), and 62.7% and 44.1% of the guardians answered 'yes', respectively (p=0.001), demonstrating a significant difference between the terms used before and after the renaming, for both patients and guardians (Figure 4).

In the university students 22.1% and 93.6% of the respondents reported that they were aware of the disease name, 'attunement disorder' and 'split-mind disorder', respectively, demonstrating a statistically significant difference (p<0.001). When asked about the 'source of awareness of the term attunement disorder, the top response was media (TV and news-

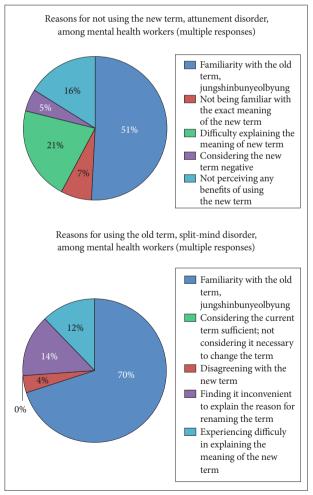


Figure 2. Mental health workers' reasons for not using the new term and retaining the old term. Why do you use the old term without using the new term?

paper) (50.0%), followed by the Internet (34.4%). The top responses to the 'source of awareness of the term split-mind disorder' were media (TV and newspaper) (73.3%), followed by the Internet (16.8%).

When asked 'how do you feel when you hear the disease

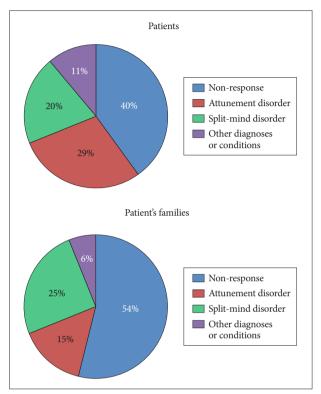


Figure 3. The diagnosis that patients or their quardians related to their illness. What is the disease name of you or your family?

name attunement disorder rather than split-mind disorder?', 35.7% of the university students answered that they 'thought attunement disorder is a less severe disorder (a disorder with higher treatability) than split-mind disorder is, and 3.6% answered that they considered attunement disorder as a more severe disorder (a disorder with lower treatability) as compared to split-mind disorder. Further, these findings exhibited a statistically significant difference (p<0.001) (Figure 5).

DISCUSSION

In the present study, only 29.4% of the patients and 15.0% of their guardians recognized the name of their or their family

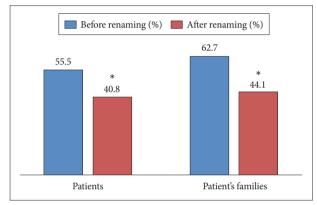


Figure 4. Changes in informing about the diagnosis among patients and their guardians. Before renaming: did your doctor inform you of the exact diagnosis (split-mind disorder) before it was renamed?. After renaming: does your doctor inform you of the exact diagnosis (attunement disorder) after it has been renamed? *p<0.05, p-values were computed using the chi-square test.

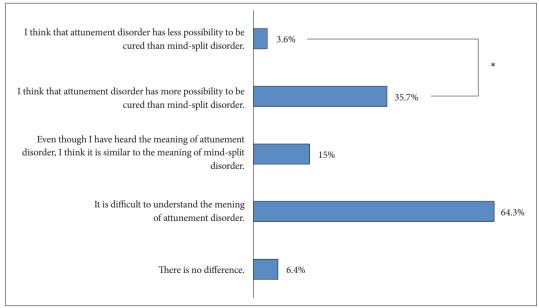


Figure 5. The university students' perspectives on the new name (attunement disorder). What comes to your mind when you hear 'attunement disorder' (instead of 'split-mind disorder')? Multiple responses were made. *p<0.001.

member's illness as 'attunement disorder'. On the other hand, the notification rate of the disease name by psychiatrists, psychiatric residents, and social workers increased significantly after the renaming of the disease, and the university students considered attunement disorder to have a better prognosis than split-mind disorder did. This suggests the prospect of a positive change in the treatment environment and reduction in the related stigma, and confirms the strong need for education and publicity regarding the renaming.

In 2008, when we received feedback on the name change in preparation for the Korean name of schizophrenia, 101 (67.3%) of the 150 sampled psychiatrists and psychiatric residents approved of the name change.⁶ In the present study, 92.8% of the psychiatrists and 94.5% of the psychiatric residents agreed with the need for the name change, demonstrating an increase in the agreement rate as compared to that reported in the previous study. Further, 149 (54.0%) of the 289 patients and 51 (69.9%) of the 74 guardians agreed to the need for renaming the disease in a study conducted in 2008,6 while the same increased to 69.3% for patients and 76.6% for guardians in the present study. Again, this shows the increase in the rate of agreement as compared to that reported in 2008. These changes can be considered to have occurred owing to the increase in the society's interest on the stigma and prejudice related to mental illness.

Despite a high rate of agreement with the name change, 71.4% of the mental health practitioners responded that 'renaming schizophrenia cannot resolve the stigma. Although there has been a long-standing debate on whether the renaming could resolve the prejudice or stigma related to schizophrenia,11,12 the results of a study comparing the prevalence of prejudice and stigma attributed to 'attunement disorder' and 'split-mind disorder' showed that the former evoked significantly lower discriminatory behaviour than the latter did.¹³ The present study corroborated this finding, in that a higher proportion of respondents from the university students perceived attunement disorder as having a better prognosis as compared to split-mind disorder. Thus, we can expect a decrease in the stigmatization effect of the term 'split-mind disorder'.

In the present study, the percentage of people who were aware of split-mind disorder was high, with 93.6%, while the rate of awareness about attunement disorder was 22.1%, and the rate of awareness about the name change was only 16.5%. When asked about the source of the awareness of 'attunement disorder' and 'split-mind disorder', media (TV and newspaper) was the most prevalent answer for both terms, reconfirming the influence of mass media on people's awareness.^{4,5} Thus, appropriate mass media coverage as well as the promotion of the renaming of schizophrenia through the mass media is important for improving awareness and reducing stigma in the society.

In this study, we were able to confirm the effects of the renaming through the notification rate of disease name by psychiatrists, psychiatric residents, and social workers, which increased significantly after the renaming. In a survey of mental health doctors in Japan, the notification rate of the disease name was 36.7% in 2002, when the name was changed, and it increased to 65.0% in 2003, and 69.7% in 2004.14 In the present study, the notification rate of the disease name by psychiatrists and psychiatric residents was 88.6% and 95.3%, respectively, confirming the high effectiveness of the renaming as compared to that observed in Japan. 'Familiarity with the old term (split-mind disorder)' was the most common response for both 'not using the term attunement disorder' and 'continuing to use the old term split-mind disorder. In addition to the conscious effort to use 'attunement disorder', a multitude of measures are needed to promote the use of this term.

In a study by Jang et al.,7 which investigated the factors affecting drug compliance, 115 (57.8%) of the 199 schizophrenia patients knew their diagnosis as attunement disorder or split-mind disorder, and, of them, 14 (7.0%) reported 'attunement disorder' as the name of their disease. In the present study, the rate of identifying their disease as 'attunement disorder' rather than 'split-mind disorder' was higher than that reported by Jang et al. in 2012. Considering the fact that the previous study was conducted shortly after the renaming of the disease, it is reasonable to assume that the effect of education on attunement disorder may have taken shape over time.

In 2008, the renaming of the disease was expected to increase the percentage of patients and guardians who knew the diagnosis name, but the present study could not confirm such an effect. In a study conducted in Korea prior to the renaming, 63.8% of the patients and 73.1% of the guardians were correctly aware of the diagnosis name, whereas the rate was lower in the present study, with 49.6% of the patients and 39.4% of the guardians answering 'attunement disorder' or 'split-mind disorder' as the patient's diagnosis. Similarly, the percentage of patients diagnosed with attunement disorder by the doctor after the renaming actually declined as compared to the rate of receiving a diagnosis of 'split-mind disorder' prior to the renaming. These results may be due to the effect of the length of treatment in the hospital of the subject patient or the subject guardian of the patient.

As the mean length of treatment was 15.5 years for patients and 11.7 years for patients who were under the protection of guardians, the present sample comprised very few patients who had been diagnosed after the renaming. Therefore, it is possible that the mental health practitioners did not re-inform the patient or guardians that the illness was called attunement disorder to patients and guardians who were previously informed of the illness as split-mind disorder prior to the renaming. Education on the name change is necessary not only for early onset patients but also for chronic patients and their guardians. Further, in future, studies that distinguish early onset and chronic patients will help identify the effects of the renaming more accurately.

This study has the following limitations. First, some items of the questionnaire required the respondents to answer based on memory. Second, there is a possibility of selection bias. In particular, it is difficult to conclude that an exact comparison between the situation before and after the name change was made because not many mental health practitioners had worked in the mental health department before the renaming. In case of the university students, the sample was not representative as it only comprised college students.

However, as the sample consisted of many students from the department of journalism and mass communication, considering the influence of the mass media on the awareness of mental illness, this study can be expected to have a positive effect in terms of improving the awareness of schizophrenia through the mass media in the future. Further, future studies targeting various groups will help resolve the limitations of this study to a great extent.

This study is meaningful in that it confirms the effect of renaming not only on doctors but also on diverse subjects such as mental health practitioners, patients, guardians, and the university students. Further, as no other study confirmed the effect of the renaming of the disease in Korea, and we anticipate this study was a means of education and publicity for the subjects. Although specific circumstances may vary from across cultures, the prejudice and stigma faced by patients with schizophrenia are not unique problems of East Asian countries. 15,16 It is our hope that the renaming of schizophrenia in Korea will help solve the prejudice and stigma of mental disorders worldwide.

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