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Association of social distance toward schizophrenia with help-seeking among mothers of adolescents in Japan

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ABSTRACT

Negative maternal attitudes toward schizophrenia may be linked with delayed treatment of their children. We investigated the relation between negative attitudes toward schizophrenia and help-seeking among mothers of junior and senior high school students in Japan. The participants were 1309 Japanese mothers of junior and senior high school students. Social distance was evaluated by using the Social Distance Scale-Japanese version (SDS-J). In addition, mothers were asked about help-seeking for a child with sleeplessness, social withdrawal, and strange behavior. One-way analysis of variance and Student's t-test were used to evaluate associations between social distance toward schizophrenia and help-seeking. Most (76.4%) participants were aged 40 - 49 years. Maternal demographic characteristics significantly associated with social distance were employment and participation in welfare activities for people with mental illness. In responding to a child with sleeplessness, social withdrawal, and strange behavior, the level of maternal social distance was not significantly associated with the likelyhood of seeking psychiatric help. However, mothers with greater social distance were less likely to seek help at a psychiatric clinic. Maternal social distance toward schizophrenia was not significantly associated with seeking psychiatric help; however, it did affect the type of facility selected among those would seek such help.

Keywords: Social Distance; Schizophrenia; Help-Seeking; Mothers; Adolescence

1. INTRODUCTION

Delayed treatment of schizophrenia is associated with worse outcomes [1], e.g. increases in medication required, risk of suicide, and duration of hospital stays [2,3]. Studies have revealed factors linked with delayed detection of schizophrenia [4-6]. One such factor is stigma toward schizophrenia [7]. Many people reject schizophrenia and do not accept individuals with the disorder in their communities [8,9]. Therefore, people with schizophrenia and their families may hide their illness [9]. Schizophrenia can occur in adolescence [8], although parents may not acknowledge a child's symptoms, due to stigma. In addition, even when parents do acknowledge symptoms, they might choose to hide them instead of seeking medical care.

As compared with fathers, mothers tend to spend more time with their children. Therefore, negative maternal attitudes toward schizophrenia may lead to lack of treatment for mental illness in their children [10]. However, studies of mothers caring for their children (including adolescents) have not thoroughly examined the association between social distance toward schizophrenia and treatment. In this study, we used the social distance scale to examine the extent of negative attitudes toward schizophrenia among mothers of adolescents. The Social Distance scale Japanese Version is an evidence-based instrument that is translated from a commonly used scale. In addition, we examined hypothetical help-seeking among mothers when a child has a mental illness. We hypothesized that social distance toward schizophrenia

would mediate the relation with maternal help-seeking at any psychiatric facility or department and that mothers with greater social distance would not seek help at a mental hospital. In this prospective cohort study, we examined the relation between negative attitudes toward schizophrenia and help-seeking among mothers of junior and senior high school students in Japan.

2. PARTICIPANTS AND METHODS

2.1. Participants

The participants were 1309 Japanese mothers of 696 junior high school students and 613 senior high school students and were extracted from 1,370,000 candidates included in a database administered by a Japanese private company specializing in questionnaire research. Stratified random sampling was used, as previously described [11-13]. The study was approved by the Ethics Committee of the Niigata University School of Medicine.

2.2. Measurement

The participants completed a questionnaire that requested information on sociodemographic data. Social distance was evaluated by using the Social Distance Scale-Japanese version (SDS-J) [14]. The items on the scale are answered using a 4-point Likert scale: 3, strongly agree; 2, tend to agree; 1, tend to disagree; and 0, strongly disagree. A higher score indicates greater social distance. A detailed explanation of this questionnaire has been previously published [15].

Mothers were also asked about what help they would seek if they had a child with sleeplessness, social withdrawal, and strange behavior. Specifically, they were asked the type of medical facility at which they would seek a consultation. The details of this questionnaire have been previously published [13].

2.3. Statistical Analysis

All analyses were performed using the Statistical Package for Social Sciences (SPSS), version 18.0. One-way analysis of variance and Student's t-test were used to examine the associations between social distance toward schizophrenia and maternal demographic characteristics and the associations between social distance and help-seeking.

3. RESULTS

3.1. Participant Characteristics

Most (76.4%) participants were aged 40 - 49 years (**Table 1**), and 540 (41.3%) were full-time housewives. Most respondents (54.5%) reported a family income of 53,000 - 110,000 US dollars, and 112 (8.5%) reported participation in welfare activities for people with mental illnesses. The findings were discussed in detail in our previous report [11-13].

3.2. Relation between Social Distance and Maternal Demographic Characteristics

The mean score ± SD on the Social Distance Scale was 12.2 ± 3.9 (range, 0 - 24). Maternal demographic characteristics significantly associated with social distance were employment and participation in welfare activities for people with mental illness (**Table 1**). The mean score for mothers who had not taken part in welfare activities for people with mental illness was higher than that for mothers who had. The mean score for self-employed mothers was the highest among employed mothers.

3.3. Relation between Social Distance and Help-Seeking

On the questionnaire that asked about hypothetical help-seeking for a child with sleeplessness, social withdrawal, and strange behavior, there was no significant association between maternal social distance and the likelihood of seeking psychiatric help ($p = 0.060$; **Table 2**). However, maternal social distance was significantly inversely associated with seeking help at a psychiatric clinic ($p = 0.003$) and at the child's school ($p = 0.003$). There was no significant association with seeking help at a mental hospital, department of psychosomatic medicine, or department of internal medicine ($p = 0.064$, $p = 0.077$, and $p = 0.966$, respectively), or with treatment timing ($p = 0.909$).

4. DISCUSSION

Parental attitudes toward schizophrenia are an important factor in early detection and intervention for a child with schizophrenia [11] because negative attitudes toward schizophrenia are associated with delayed treatment [4], which has a negative effect on prognosis [16,17]. In addition, because people with schizophrenia typically have little understanding of the disorder, family support is very important for early detection and treatment.

The limited number of previous studies of attitudes toward schizophrenia among parents of adolescents have mostly focused on factors that affect those attitudes [11,18]. Demographic characteristics significantly associated with parental attitudes were family income, occupation, presence of a neighbor with schizophrenia, and participation in welfare activities for people with mental illness [11]. Explanation for the discrepancy between the findings of studies of mothers and studies of parents was

Table 1. Distribution of scores on Social Distance Scale-Japanese version (SDS-J), by maternal demographic characteristics.

	SDS-J		
	n	**Mean ± SD**	**p***
Age (years)			p = 0.267
30 - 39	178	12.14 ± 3.46	
40 - 49	1000	12.26 ± 3.97	
50 - 59	129	11.63 ± 4.14	
60 - 69	2	9.50 ± 2.12	
Occupation			p = 0.529
Agriculture, forestry, and fisheries	3	12.00 ± 0.00	
Production labor services	135	12.48 ± 3.92	
Transportation and communications	26	13.12 ± 4.07	
Sales and marketing	141	12.62 ± 3.85	
Service industry	162	12.01 ± 3.78	
Professional	204	12.10 ± 4.14	
Other	638	12.05 ± 3.90	
Employment			p = 0.017
Full-time	227	12.36 ± 3.68	
Part-time	461	12.17 ± 4.00	
Self-employed	62	13.03 ± 4.47	
Full-time housewife	540	12.10 ± 3.83	
Unemployed	19	9.58 ± 4.62	
Annual family income, (US dollars)			p = 0.100
<11,000	25	12.80 ± 4.22	
11,000 - 32,000	130	12.19 ± 4.04	
32,000 - 53,000	255	11.95 ± 4.20	
53,000 - 110,000	713	12.06 ± 3.76	
>110,000	186	12.86 ± 3.97	
Participation in welfare activities for people with mental illness			p = 0.001
Yes	112	10.83 ± 3.87	
No	1197	12.31 ± 3.90	

*Student's t-test; one-way analysis of variance.

not significantly associated to age, occupation, and family income. In the present study, 76.5% of mothers were part-time workers or full-time housewives; thus, family income depended primarily on fathers. Maternal occupation was not significantly associated with social distance, which differs from the results of Lysaker *et al.* [5]. Put another way, the present results show that maternal social status was not associated with attitudes toward schizophrenia.

We examined the association of maternal social distance toward schizophrenia with the likelihood of medical consultation, the type of consultation sought, and the timing of treatment for a child with symptoms of mental illness. The results showed that level of maternal social distance was not associated with likelihood of seeking psychiatric help or treatment timing. These findings are new and somewhat contradictory to our study hypothesis and earlier findings. Indeed, a number of studies have shown that a negative attitude toward schizophrenia is associated with a lower likelihood of seeking psychiatric help [4-6].

These differing results may be due to differences in the

Table 2. Association of SDS-J with help-seeking among mothers.

Type of consultation	SDS-J score		
	n	Mean ± SD	p
Any psychiatric consultation			p = 0.060
Yes	853	12.03 ± 4.02	
No	456	12.46 ± 3.72	
Mental hospital			p = 0.064
Yes	177	11.66 ± 4.04	
No	1132	12.26 ± 3.90	
Dept. of psychosomatic medicine			p = 0.077
Yes	713	12.00 ± 3.92	
No	596	12.39 ± 3.91	
Psychiatric clinic			p = 0.003
Yes	309	11.61 ± 4.21	
No	1000	12.36 ± 3.81	
Dept. of internal medicine			p = 0.966
Yes	77	12.19 ± 3.19	
No	1232	12.18 ± 3.96	
Timing of medical			p = 0.909
Help-seeking			
Within 1 week	565	12.26 ± 4.05	
About 1 month later	605	12.10 ± 3.75	
About 6 months later	96	12.29 ± 3.73	
More than 1 year later	21	12.24 ± 5.29	
Non-medical help sought	22	11.64 ± 4.46	
School			p = 0.003
Yes	554	11.80 ± 3.81	
No	755	12.46 ± 3.98	

SDS-J, Social Distance Scale-Japanese version.

medical systems of Japan and other countries. In Western countries most people have primary care physicians [19], who would be the first medical professional to be consulted in the event of symptoms of medical illness. Then, if necessary, primary care physicians would refer the patients to specialists in counseling or psychiatry. Most Japanese do not have a regular primary care physician and can freely seek specialist psychiatric care. Treatment and consultation in an outside community are also possible. Therefore, Japanese mothers might feel fewer constraints, and can seek medical help at any time. However, Japanese mothers might be more concerned than their Western peers about public scrutiny, as suggested by the reluctance of mothers with greater social distance to seek help at their child's school (**Table 2**). In other words, mothers may desire to hide their child's potential mental illness from school authorities.

We also found that a negative attitude toward schizophrenia affected the type of hospital selected, namely, it significantly reduced maternal help-seeking at psychiatric clinics. This result differs from the findings of a study by Platz *et al.*, which showed that a substantial number of contacts with mental health care professionals were made along help-seeking pathways. The label of schizophrenia is related to stigma [20,21]. In Japan, the disease name was changed from *seishin bunretsu byou* to *tougou shicchou shou* in 2002, after which the proportion of patients who were informed of their diagnosis increased from 36.7% to 69.7% in 3 years [22,23]. Therefore, the disease name likely affects the public image of

the disease. Mothers that avoid psychiatric clinics may have an unfavorable image of such clinics. However, the number of psychiatric clinics is increasing in Japan. Future research should focus on understanding why these negative attitudes cause individuals to avoid only psychiatric clinics. In addition, if the case is to be made that negative attitudes have a substantial effect on illness evaluation, researchers should examine whether such attitudes are linked to other disease components, such as depression.

We would like to highlight three points from our results. First, when symptoms of mental illness occur in children, mothers should quickly seek expert evaluation and treatment because delayed treatment is linked to worse prognosis [1]. Second, schools should improve mental-health support systems, the most important aspect of which is specialist treatment by a psychiatrist. Most children commute to school, so adequate mental-health support systems at schools are important. The school should be a supportive environment where mothers can comfortably discuss their child's mental health problems. Third, methods to address stigma are essential. These three points may assist in early detection and intervention for schizophrenia in adolescents.

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