

# How Successful Are Physicians in Eliciting the Truth From Their Patients? A Large-Scale Internet Survey From Patients' Perspectives

Norifusa Sawada, MD; Hiroyuki Uchida, MD, PhD; Koichiro Watanabe, MD, PhD;  
Toshiaki Kikuchi, MD, PhD; Takefumi Suzuki, MD, PhD; Haruo Kashima, MD, PhD;  
and Masaru Mimura, MD, PhD

## ABSTRACT

**Objective:** How honestly patients report their symptoms and medication adherence to their physicians has not been adequately addressed in patients with depression. We therefore conducted a large-scale Internet survey in an effort to discover how successful physicians are in eliciting the truth from their patients and also to examine reasons for patients' truth-concealing behaviors.

**Method:** 2,354 participants who had received treatment for depression within the past year and had been diagnosed with depression by Patient Health Questionnaire were identified from 323,226 registrants at the Macromill database through screening procedures. Participants were asked to complete a questionnaire regarding their treatment for depression with a special focus on patient-physician relationship. This study was conducted from December 7 to 13, 2010, in Japan.

**Results:** 2,020 participants successfully completed the questionnaire. Overall, 70.2% of responders reported that they had withheld the truth from their physicians. A logistic regression model found significant associations of such a behavior with female sex (95% CI, 1.15–1.74;  $P = .001$ ), younger age (95% CI, 0.49–0.97;  $P = .030$ ), and a lower degree of satisfaction in mutual communication (95% CI, 3.17–6.58;  $P < .001$ ). 69.2% and 52.6% of the participants refrained from telling about their "daily activities" and "symptoms," respectively. Female participants were more likely to hide the facts concerning "adherence to prescribed medication" and "figures such as body temperature and weight." 31.9% of participants had discontinued the treatment without consulting their physician, which was again more frequent in females, younger persons, and those who were not satisfied with communication with their physician.

**Conclusions:** While the findings obtained herein need to be replicated in other patient populations, a majority of patients with depression were reluctant to uncover the truth, which emphasizes the need for more fine-tuned suspicion among physicians about symptoms and medication adherence.

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Corresponding author: Norifusa Sawada, MD, Department of Psychiatry, Oizumi Hospital, 6-9-1 Oizumigauenchō, Nerima-ku, Tokyo, 178-0061, Japan (sawada\_@tb3.so-net.ne.jp).

Depression is a chronic, recurrent, and debilitating illness, and approximately one-half of all patients are reported to relapse within 6 months if they discontinue antidepressant drugs immediately after achieving remission.<sup>1</sup> On the other hand, if they continue taking antidepressants, the relapse rate can be lowered to 10%–25%.<sup>1,2</sup> However, one of the major obstacles that hamper therapeutic effects in reality is patients' suboptimal adherence to these drugs. We previously investigated persistence and compliance to antidepressant drugs in 367 patients with major depressive disorder in clinical outpatient settings and found that only 44.3% of patients continued antidepressant treatment for 6 months.<sup>3</sup> Moreover, 63.1% of patients who discontinued their initial antidepressant drug did so without consulting their psychiatrists, which clearly indicates a lack of sufficient mutual communication between patients and their psychiatrists. Furthermore, the rate of patients who were compliant to the antidepressant treatment, defined as a medication possession rate of  $\geq 0.8$ , was as low as 55.6%, which also underscores substantial room for improvement toward a successful treatment. Thus, enhancing communication and sharing information between patients and their psychiatrists would be indispensable for providing appropriate treatment for depression.

However, another major obstacle is that patients may have a tendency to conceal the truth from their physicians. To our knowledge, there is only 1 survey that investigated this issue; this cross-sectional survey that was conducted in Japan ( $N = 1,074$ ) revealed that 28% of patients with a physical illness who visited a general practitioner reported that they had not told the truth to their physicians at least once.<sup>4</sup> Furthermore, 24% of these patients did not honestly disclose the truth about their symptoms, and neither did another 24% of patients about adherence to medications. Given that determination of psychiatric diagnoses and assessment of treatment response heavily depend on the subjective information provided by patients, it is critically important to evaluate how truthfully patients report their symptoms and concerns to their psychiatrists. However, this important issue has not been addressed in patients with psychiatric disorders, including depression.

To thoroughly evaluate such patients' truth-telling behaviors toward physicians, a sufficient number in the sample is desirable. Surveys using the Internet have successfully been conducted for this purpose.<sup>5</sup> Furthermore, since anonymous participation is guaranteed and participants are less likely to feel any pressure from physicians or research staff under this particular system, we could extract more practical information that may more precisely mirror

## FOR CLINICAL USE

- ◆ Among responders with depression, about 70% reported that they had withheld the truth from their physicians.
- ◆ A logistic regression model found significant associations of such behavior with female sex, younger age, and a lower degree of satisfaction in patient-physician communication.
- ◆ Female patients were less likely than male patients to disclose the facts concerning “adherence to prescribed medication” and “figures such as body temperature and weight.”
- ◆ A good patient-physician alliance is needed to gather relevant information toward successful depression treatment.

the everyday life of patients. Using a large-scale Internet survey from patients' perspectives, this study addressed how successful psychiatrists are in eliciting the truth from their patients with depression.

## METHOD

This Internet-based survey was conducted from December 7 to 13, 2010, in Japan. A total of 2,027 participants were selected through the following steps.

### Recruitment Procedures

**Selection of participants.** A total of 323,226 people had already registered with the Internet Web site monitor system (the Macromill research monitor, <http://www.macromill.com/global/index.html>) and agreed to participate in health-related surveys on registration. Of these people, 26,007 persons were categorized as panel registrants who had suffered depression. Those registrants were invited to participate in this survey by e-mail. In this e-mail, details of this survey were first described; if participants agreed to participate in this survey and provided informed consent by clicking a corresponding button, a screening survey started. Of the 26,007 registrants, 13,527 persons agreed to participate in this survey, and 2,354 patients were identified that met the following criteria: age 20 to 69 years, having been diagnosed with major depressive disorder by a psychiatrist within the past year, having received treatment for depression within the past year, and having not been diagnosed with bipolar disorder. In addition, participants were requested to complete the 9 items of Patient Health Questionnaire (PHQ-9).<sup>6,7</sup> The PHQ is a self-administered questionnaire for determining criterion-based diagnoses of various psychiatric disorders that are common in primary care. In this study, major depression diagnosis was corroborated when 5 or more of the 9 depressive symptoms in the criteria had been present at least “more than half the days” over the last 2 weeks, and 1 of the symptoms was depressed mood or anhedonia. In total, 2,027 participants fulfilled our inclusion criteria.

**Collected information.** These 2,027 participants were asked to complete questionnaires. The information collected included sex, age, family structure, occupation, academic background, and annual income. Participants were then asked 39 questions about their experiences when

they received treatment for depression, which included communication with their physician with a special focus on whether they had not frankly disclosed the truth (see eAppendix 1, available at [PSYCHIATRIST.COM](http://PSYCHIATRIST.COM)).

### Statistical Analyses

Statistical analyses were carried out using SPSS version 18.0 for Windows (IBM, Armonk, New York). Logistic regression analysis was employed to identify predictors of participants' behavior of not telling the truth to their physician among the following variables: age in decade, sex, physicians' sex, whether participants thought their physicians were older than they were or not, participants' satisfaction with communication with their physician (ie, satisfied [very much satisfied or satisfied], not satisfied nor dissatisfied, or dissatisfied [dissatisfied or very much dissatisfied]), highest academic qualification (ie, junior high school, high school, carrier college, 2-year college, or university/graduate school), and income (ie, less than ¥4 million [equivalent to approximately US \$48,780], ¥4 million and more). We conducted another logistic regression analysis to examine predictors of treatment discontinuation or predictors of antidepressant discontinuation, using the same variables described above. Differences of interest between groups were compared with a  $\chi^2$  test. A *P* value of < .05 was considered statistically significant (2-tailed).

The present study was carried out in accordance with the latest version of the Declaration of Helsinki and approved by the Institutional Review Board at Oizumi Hospital, Tokyo, Japan. All participants provided informed consent online after a complete description of the study.

## RESULTS

### Demographic and Clinical Characteristics of Participants

A total of 2,027 participants completed the questionnaire. Of these, 7 were excluded because they did not follow the instructions. Thus, the data from 2,020 participants were included, and all participants provided necessary data for statistical analyses. Their mean  $\pm$  SD age was  $39.1 \pm 8.56$  years, and 45.0% (*n* = 909) were men. More than four-fifths of the participants were currently receiving treatment for depression, and 83.1% of the participants (*n* = 1,678) reported that their psychiatrist was male.

**Table 1. Comparison of the Participants Who Concealed the Truth, Discontinued Treatment Without Consulting Their Physician, and Discontinued Their Antidepressant Drugs Without Consulting Their Physician**

Characteristic	Having Concealed the Truth (%)	Having Discontinued Treatment Without Consulting Their Physicians (%)	Having Discontinued Antidepressants Without Consulting Their Physicians (%)
All participants (N = 2,020)	70.2	31.9	44.7
Sex			
Male (n = 909)	65.3	25.9	42.2
Female (n = 1,111)	74.2 <sup>a</sup>	36.8 <sup>f</sup>	46.8
Age groups, y			
20–29 (n = 291)	77.3	39.5	51.2
30–39 (n = 766)	73.8	35.1	47.1
40–49 (n = 742)	67.3 <sup>b</sup>	26.4 <sup>g</sup>	42.5
50–59 (n = 192)	57.2 <sup>c</sup>	31.7	34.8
60–69 (n = 29)	62.0	13.7 <sup>h</sup>	37.9
Income			
< ¥ 4 million (approximately US \$48,780; n = 729)	73.3	33.6	46.0
≥ ¥ 4 million (approximately US \$48,780; n = 985)	67.4	29.5	42.7
Physician's sex			
Male (n = 1,678)	69.5	31.7	44.9
Female (n = 342)	73.6	32.7	43.8
Estimated physician's age			
Younger than participants (n = 302)	71.5	26.4	35.7
Older than participants (n = 1,718)	62.9	32.8	46.3 <sup>k</sup>
Degree of participants' satisfaction in the communication with their physicians			
Satisfied (n = 1,112)	59.0	24.2	36.3
Not satisfied nor dissatisfied (n = 620)	82.4 <sup>d</sup>	38.4 <sup>i</sup>	52.4 <sup>l</sup>
Dissatisfied (n = 288)	86.8 <sup>e</sup>	47.5 <sup>j</sup>	61.4 <sup>m</sup>

<sup>a</sup>Odds ratio = 1.42 (95% CI, 1.15–1.74,  $P = .001$ ) vs males, by logistic regression analysis.

<sup>b</sup>Odds ratio = 0.69 (95% CI, 0.49–0.97,  $P = .030$ ) vs age group 20–29, by logistic regression analysis.

<sup>c</sup>Odds ratio = 0.42 (95% CI, 0.27–0.64,  $P < .001$ ) vs age group 20–29, by logistic regression analysis.

<sup>d</sup>Odds ratio = 3.35 (95% CI, 2.63–4.27,  $P < .001$ ) vs “satisfied,” by logistic regression analysis.

<sup>e</sup>Odds ratio = 4.57 (95% CI, 3.17–6.58,  $P < .001$ ) vs “satisfied,” by logistic regression analysis.

<sup>f</sup>Odds ratio = 1.54 (95% CI, 1.26–1.88,  $P < .001$ ) vs males, by logistic regression analysis.

<sup>g</sup>Odds ratio = 0.65 (95% CI, 0.48–0.87,  $P = .004$ ) vs age group 20–29, by logistic regression analysis.

<sup>h</sup>Odds ratio = 0.29 (95% CI, 0.10–0.87,  $P = .027$ ) vs age group 20–29, by logistic regression analysis.

<sup>i</sup>Odds ratio = 1.98 (95% CI, 1.60–2.45,  $P < .001$ ) vs “satisfied,” by logistic regression analysis.

<sup>j</sup>Odds ratio = 2.78 (95% CI, 2.12–3.65,  $P < .001$ ) vs “satisfied,” by logistic regression analysis.

<sup>k</sup>Odds ratio = 0.66 (95% CI, 0.51–0.86,  $P = .002$ ) vs estimated physicians' age “younger than participants,” by logistic regression analysis.

<sup>l</sup>Odds ratio = 1.92 (95% CI, 1.57–2.35,  $P < .001$ ) vs “satisfied,” by logistic regression analysis.

<sup>m</sup>Odds ratio = 2.64 (95% CI, 2.02–3.44,  $P < .001$ ) vs “satisfied,” by logistic regression analysis.

### Factors and Reasons Associated With Participants' Not Telling the Truth

Overall, 70.2% of responders reported that they had, at least once, not told the truth to their psychiatrists (Table 1). The logistic regression model found significant associations of such a behavior with female sex, younger age, and a lower degree of satisfaction in the communication with their physicians. On the other hand, no effect was found for their income, academic background, physicians' sex, and physicians' estimated age.

Issues about which participants hid the truth are summarized in Table 2. More than two-thirds of the participants who concealed the truth reported that they did so about their daily activities, and more than half did not accurately report their symptoms on purpose. Male sex was significantly associated with not frankly disclosing the truth about “daily activities” ( $P = .031$ ) and “intake of alcohol and illicit drugs” ( $P = .021$ ). In contrast, “adherence to prescribed medication” and “figures such as body temperature and weight” were not honestly reported more frequently in females ( $P = .019$  and  $P = .001$ , respectively).

The most frequent reason the participants did not tell the truth was “I found it difficult to talk with my doctor” (49.0%),

**Table 2. Issues About Which Participants Had Withheld the Truth**

Issue	Total % (n)	Male, %	Female, %
Daily activities of life	69.2 (983)	72.3 <sup>a</sup>	67.0
Symptoms	52.6 (746)	53.0	52.2
Adherence to medication	20.2 (286)	17.1	22.3 <sup>c</sup>
Intake of alcohol and illicit drugs	15.5 (220)	18.1 <sup>b</sup>	13.5
Side effects	8.4 (119)	9.3	7.8
Figures such as body temperature and weight	4.4 (63)	2.4	6.0 <sup>d</sup>
Other	9.2 (130)	7.5	10.3

<sup>a</sup> $P = .031$  vs female, by  $\chi^2$  test.

<sup>b</sup> $P = .021$  vs female, by  $\chi^2$  test.

<sup>c</sup> $P = .019$  vs male, by  $\chi^2$  test.

<sup>d</sup> $P = .001$  vs male, by  $\chi^2$  test.

followed by “I thought my doctor would not take it seriously even if I told him/her” (36.5%) and “I found it embarrassing to tell the truth” (30.0%). Other reasons are summarized in Table 3. Female sex was significantly associated with not frankly disclosing the truth because “I thought my doctor would not take it seriously even if I told him/her” ( $P < .001$ ), “My doctor looked busy” ( $P = .002$ ), and “I could not trust my doctor” ( $P = .024$ ). In contrast, “If I had told the truth, my doctor would have likely suggested to me to take a sick leave

**Table 3. Reasons for Concealing the Truth**

Reason	Total, % (n)	Male, %	Female, %
"I found it difficult to talk with my doctor"	49.0 (696)	48.8	49.2
"I thought my doctor would not take it seriously even if I told him/her"	36.5 (518)	30.6	40.7 <sup>a</sup>
"I found it embarrassing to tell the truth"	30.0 (425)	32.1	28.3
"I was confused"	24.8 (352)	24.4	25.0
"My doctor looked busy"	15.2 (215)	11.6	17.6 <sup>b</sup>
"I did not want to bother my doctor"	14.7 (208)	14.1	15.0
"I could not trust my doctor"	11.7 (166)	9.42	13.3 <sup>c</sup>
"If I had told the truth, my doctor would have likely suggested to me to take a sick leave from work or quit my job"	11.1 (158)	14.4 <sup>d</sup>	8.72
Other	11.6 (165)	9.09	13.4 <sup>e</sup>

<sup>a</sup> $P < .001$  vs male, by  $\chi^2$  test.

<sup>b</sup> $P = .002$  vs male, by  $\chi^2$  test.

<sup>c</sup> $P = .024$  vs male, by  $\chi^2$  test.

<sup>d</sup> $P = .001$  vs female, by  $\chi^2$  test.

<sup>e</sup> $P = .012$  vs male, by  $\chi^2$  test.

**Table 4. Participants' Reasons for Treatment Discontinuation Without Consulting Their Physicians**

Reason	Total, % (n)	Male, %	Female, %	P Value
"My symptoms did not improve even though I received treatment"	34.7 (224)	31.7	36.4	.264
"I did not get along well with my doctor"	32.6 (210)	27.1	35.6	.029 <sup>a</sup>
"My symptoms got better"	31.1 (201)	37.7	27.3	.008 <sup>a</sup>
"I could not afford the medical bills"	26.6 (172)	22.4	29.0	.079
"I could not go out/I did not want to go out"	18.8 (121)	13.9	21.5	.021 <sup>a</sup>
"I was too busy to go to the hospital/clinic"	18.1 (117)	19.0	17.6	.682
"The hospital/clinic was in an inconvenient location"	15.1 (98)	13.5	16.1	.426
"My doctor did not listen to me very much"	15.0 (97)	13.9	15.6	.648
"Waiting time was too long"	14.7 (95)	12.2	16.1	.205
"I experienced side effects"	8.37 (54)	8.47	8.31	1.000
"I moved"	7.90 (51)	7.20	8.31	.653
"I was afraid that my neighbors would notice my visit to a psychiatric hospital/clinic"	6.82 (44)	6.35	7.09	.871
"My family or friends suggested to me not to go to a psychiatric hospital/clinic"	3.87 (25)	2.54	4.64	.210
Other	11.1	10.0	13.1	.244

<sup>a</sup>By  $\chi^2$  test.

from work or quit my job" was the reason for withholding the truth in males ( $P = .001$ ).

When the participants were asked, "What do you think would make patients feel free to tell the truth to their doctors during the treatment?" the most frequent response was "doctors spend more time with each patient" (68.4%), followed by "providing an environment where patients and doctors can freely discuss issues" (33.5%) and "communication and explanation, using letters or memos" (29.8%).

**Frequency of Discontinuing Therapy for Depression**

Among 2,020 participants, 31.9% discontinued any form of their treatment for depression, including nondrug therapies such as psychotherapies, without consulting their

**Table 5. Reasons for Antidepressant Discontinuation Without Consulting Their Physicians**

Reason	Total, % (n)	Male, %	Female, %	P Value
"My symptoms got better"	37.3 (337)	40.1	35.1	.14
"I was afraid of getting hooked on prescribed medications"	29.3 (265)	30.2	28.6	.66
"I experienced side effects"	28.9 (262)	29.1	28.8	.94
"Prescribed medications were not effective"	27.2 (246)	30.4	25.0	.08
"I did not know how long I should have kept taking antidepressants"	23.7 (214)	24.7	22.8	.53
"I was afraid of the potential side effects"	18.9 (171)	17.9	19.6	.55
"I could not afford the medical bills"	18.0 (163)	15.6	19.8	.12
"My doctor prescribed multiple medications"	16.8 (152)	13.0	19.6	.009 <sup>a</sup>
"I was too busy to go to the hospital/clinic"	6.5 (59)	4.68	7.88	.057
"My family or friends suggested to me to do so"	5.2 (47)	4.42	5.76	.449
Other	11.0 (100)	8.33	13.6	.025 <sup>a</sup>

<sup>a</sup>By  $\chi^2$  test.

physicians (Table 1). The logistic regression model found significant associations for such a behavior with female sex, younger age, and a lower degree of satisfaction in the communication with their physicians, while no effect was found in their income or academic background. Participants' frequently endorsed reasons for discontinuing treatment without consulting their physicians are shown in Table 4. Among the total sample, 44.7% quit taking antidepressant drugs without consulting their physicians (Table 1). The logistic regression model found significant associations for such a behavior with physicians' estimated age and a lower degree of satisfaction with the communication with their physicians, while no effect was found for their sex, age, income, academic background, or physicians' sex. Frequent reasons for such a discontinuation are shown in Table 5.

**Patients' Need for the Treatment of Depression**

When the participants were asked for factors that could influence their subjective preference of antidepressants, they gave the highest priority to good balance between efficacy and tolerability (48.2%), followed by strong efficacy (19.5%), fewer side effects (15.7%), rapid onset of action (7.4%), and low cost (2.3%).

**DISCUSSION**

Using a large-scale Internet survey from patients' perspectives, this study addressed how successful physicians are in eliciting the truth from their patients with depression. To our knowledge, this is the first study to investigate this question. The results are somewhat disappointing in that the rate of patients with depression who had not told the truth was as high as 70.2%, and withholding disclosure was found to be influenced by female sex, younger age, and a lower degree of satisfaction in mutual communication with their physicians.



Approximately two-thirds of the participants with depression had hidden the truth from their psychiatrists; this rate was much higher than that found in patients with physical illness (28%).<sup>4</sup> In addition, while the most frequent issues about which patients with physical illness did not tell the truth were “symptoms” (24%) and “adherence to medication” (24%),<sup>4</sup> the most frequent issue in patients with depression was “daily activities of life” (69.2%), which is of a high clinical relevance as well as a significant concern for the treatment of depression. Depression is not only characterized by psychopathological depressive symptoms but also accompanied by consequences derived from those symptoms, such as impaired daily social functioning.<sup>8</sup> In this context, a possible discrepancy between subjectively reported versus objectively evaluated daily activities and functioning needs to be carefully ascertained.

The results showed that female participants tended to conceal the truth more frequently, and they did so especially about “adherence to prescribed medications” and “figures such as body temperature and weight.” This sex difference is consistent with the finding in patients with physical illness in the literature.<sup>4</sup> Although potential mechanisms underlying the sex differences remain unclear, this aspect should be taken into account in an adherence evaluation that frequently relies upon subjective confession. Among the participants, 83.1% reported that their psychiatrist was male; this rate is comparable to those of male physicians in Japan (81.9%)<sup>9</sup> and the United States (82.2%).<sup>10</sup>

We also found that older participants were more likely to tell the truth and were less likely to discontinue their treatment; this finding is consistent with the literature.<sup>3,11</sup> For example, Harman et al<sup>12</sup> reported that younger patients with depression were less likely to receive any treatment, less likely to fill an adequate number of prescriptions, and less likely to receive an adequate number of counseling sessions. Minami-sawa et al<sup>13</sup> also found that being younger in patients with psychiatric illness was associated with a lower degree of trust toward their psychiatrists. These findings collectively suggest that younger patients may be less likely to establish a good therapeutic relationship with their psychiatrists. More than two-thirds of the participants in the present study thought that they would feel ready to tell the truth to their physicians if their doctors spent more time with them. However, the actual impact of the time spent with each patient has not been systematically investigated in this study, leaving a question as to how much time spent with a patient is optimal.

Another pertinent finding is that one-third of the participants had discontinued their treatment without consulting their physicians, and the most frequently endorsed reason for doing so was “*my symptoms did not improve even though I received treatment.*” This finding argues for the fact that currently available antidepressants do not necessarily meet the need of many patients with depression. In fact, the STAR\*D study<sup>14</sup> demonstrated that only 28% of depressed patients achieved remission with a first-line selective serotonin reuptake inhibitor. Pigott et al<sup>15</sup> reanalyzed the data from STAR\*D and found that the results of STAR\*D may

be even worse than previously appreciated. Furthermore, as Fournier et al<sup>16</sup> claimed, the magnitude of benefit of antidepressant medication compared with a placebo may be minimal or nonexistent in patients with mild or moderate symptoms. The second most common reason participants gave for discontinuing their treatment was “*I did not get along well with my doctor,*” plausibly suggesting that a better therapeutic alliance should be targeted, which in turn would be expected to enhance treatment adherence and outcomes.

Approximately half the participants discontinued their antidepressant drugs without consulting their physicians, and the most common reason for doing so was “*my symptoms got better.*” This sounds reasonable but actually represents a major clinical concern in light of established therapeutic effects of antidepressant drugs for the maintenance phase.<sup>1,2,17</sup> Bull et al<sup>18</sup> reported that, whereas 72% of physicians said they usually tell patients to continue using antidepressants for at least 6 months, only 34% of patients reported being told so. Furthermore, more than half of patients reported not being told about the expected duration of antidepressant treatment needed. The second and third most frequent reasons were “*I was afraid of getting hooked on prescribed medications*” and “*I experienced side effects,*” respectively, which is consistent with the findings by Melartin et al,<sup>19</sup> who found that premature discontinuation of an antidepressant treatment was associated with a fear of dependence or side effects of antidepressants. Goethe et al<sup>20</sup> reported that experiencing side effects could double the risk of treatment discontinuation. Previous studies have demonstrated that sufficiently discussing potential side effects could result in a greater degree of adherence to medications.<sup>18</sup> Therefore, physicians should be encouraged to discuss side effects of medications to reduce unwanted discontinuation of the treatment.

A lower degree of satisfaction in communication with physicians was found to be significantly associated with not disclosing the truth. Moreover, participants who were not satisfied with communication with their doctors were also found to be more likely to discontinue their antidepressant treatment. Effective physician-patient communication can increase the likelihood of a favorable health outcome,<sup>21</sup> and encouraging patients to take an active role in their health care can lead to treatment success.<sup>22</sup> To achieve this, introducing shared decision-making may improve communication between patients with depression and physicians as well as patients’ satisfaction.<sup>17,23</sup> Moreover, such active participation in the treatment process can also improve treatment adherence and clinical outcome.<sup>24</sup>

There are several limitations in the present study. First, although we systematically used the PHQ-9 as a validated diagnostic tool for depression, the diagnosis was solely based on participants’ self-report, which could be associated with either overdiagnosis or underdiagnosis. Second, we were not able to detect the frequency and duration (ie, stability or consistency) of participants’ behavior of withholding the truth as well as depression severity. Moreover, the frequency of visits would have varied across patients, but this was not investigated herein. Furthermore, adherence and other issues

as a function of frequency of visits to the psychiatrists should be carefully considered.<sup>25</sup> Third, female participants in our study were less likely to tell the truth than males. Another possibility here is that they might be more likely to acknowledge their dishonesty than males. Fourth, differences in cultural background could affect doctor-patient relationships. More than 99% of Japanese citizens are from a single ethnic group and communicate in Japanese, which may, in part, limit the extrapolation of our results to societies with multiethnic cultures and emphasizes the need for further investigations in other cultural settings. Fifth, the participants who agreed to participate in this type of study may be more cooperative than the general patient population, and our findings may therefore overestimate a proportion of people who communicate well with their physician to some extent. Furthermore, limiting the participants to those who had an Internet access would have rendered our study sample relatively younger.<sup>26</sup> Indeed, the mean age of the study participants was younger than the Japanese population by about 4 years (39.1 vs 43.3 years). Rather, despite this potential selection bias, it is surprising to find that more than 70% of the participants withheld the truth, and this type of survey will add to a clinical challenge of eliciting issues in patients. Sixth, the severity of illness, actual antidepressant in use, and side effects, which were not systematically evaluated in the present study, could have confounded the results. Finally, and most importantly, cross-sectional surveys cannot address long-term treatment outcomes, and only fixed responses were available to participants. These limitations are inevitably associated with Internet surveys and therefore have to be carefully acknowledged.

## CONCLUSION

The fact that more than 70% of patients with depression do not disclose the truth to their physicians emphasizes the need for clinical suspicion as well as more objective assessment of their symptoms and medication adherence. Furthermore, when communication between patients and their physician is suboptimal, patients' status and behavior should be monitored with more objective vigilance in an effort to avoid undesirable premature withdrawal from antidepressants. This also underscores the critical importance of a good patient-physician alliance to gather relevant information toward a successful treatment.

**Disclosure of off-label usage:** The authors have determined that, to the best of their knowledge, no investigational information about pharmaceutical agents that is outside US Food and Drug Administration-approved labeling has been presented in this article.

**Author affiliations:** Department of Psychiatry, Oizumi Hospital, Tokyo (Dr Sawada); Department of Neuropsychiatry, Keio University School of Medicine, Tokyo (all authors), Japan; Geriatric Mental Health Program, Centre for Addiction and Mental Health, Toronto, Ontario, Canada (Dr Uchida); Division of Molecular Imaging and Neuropathology, Columbia University, New York, New York (Dr Kikuchi); and Department of Psychiatry, Inokashira Hospital, Tokyo, Japan (Dr Suzuki).

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**Supplementary material:** eAppendix 1 is available at PSYCHIATRIST.COM.

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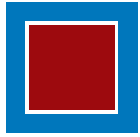
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For the CME Posttest for this article, see pages 318–319.

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# THE JOURNAL OF CLINICAL PSYCHIATRY

## Supplementary Material

**Article Title:** How Successful Are Physicians in Eliciting the Truth From Their Patients? A Large-Scale Internet Survey From Patients' Perspectives

**Author(s):** Norifusa Sawada, MD; Hiroyuki Uchida, MD, PhD; Koichiro Watanabe, MD, PhD; Toshiaki Kikuchi, MD, PhD; Takefumi Suzuki, MD, PhD; Haruo Kashima, MD, PhD; and Masaru Mimura, MD, PhD

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### List of Supplementary Material for the article

1. [eAppendix 1](#) Questionnaire

### Disclaimer

This Supplementary Material has been provided by the author(s) as an enhancement to the published article. It has been approved by peer review; however, it has undergone neither editing nor formatting by in-house editorial staff. The material is presented in the manner supplied by the author.



## eAppendix 1

Q1. Please choose a type of facility where you mainly received treatment for depression.

1. Psychiatric clinic
2. General hospital
3. University hospital
4. Psychiatric hospital
5. Clinic affiliated with the company that you worked for
6. Others

Q2. Are you currently receiving treatment for “depression” or “depressive state”?

1. Yes
2. No

Q3. How long have you suffered “depression” or “depressive state”?

\_\_years \_\_months

Q4. Have you ever experienced any relapse after a full recovery from “depression” or “depressive state”? If so, how many times?

1. Yes, \_\_times

2. No

Q5. Please choose an antidepressant drug that you have taken for the longest time?

1. Sertraline; 2. Paroxetine; 3. Fluvoxamine; 4. Milnacipran; 5. Duloxetine; 6. Mirtazapine; 7. Suipiride; 8. Clomipramine; 9. Nortriptyline; 10. Amitriptyline; 11. Imipramine; 12. Amoxapine; 13. Trimipramine; 14. Lofepramine; 15. Dosulepin; 16. Mianserin; 17. Mapritiline; 18. Setiptiline; 19. Trazodone; 20. Others

Q6. Have you ever regularly taken any of the following anxiolytics during the treatment for “depression” or “depressive state”?

Clotiazepam; Etizolam; Flutazolam; Lorazepam; Alprazolam; Bromazepam; Diazepam; Cloxazolam; Chlordiazepoxide; Fludiazepam; Oxazepam; Medazepam; Mexazolam; Clorazepate; Loflazepate; Flutoprazepam; Prazepam; Tandospirone

1. Yes

2. No

3. I do not know / remember

Q7. Have you ever regularly taken any of the following hypnotics during the treatment for “depression” or “depressive state”?

Triazolam; Brotizolam; Lormetazepam; Rilamazafone; Flunitrazepam; Nitrazepam;  
Estazolam; Nimetazepam; Quazepam; Flurazepam; Haloazolam; Zopiclone; Zolpidem;  
Triclofos; Bromovalerylurea; Chloral; Brimide; Barbitol; Pentobarbital; Phenobarbital;  
Phenobarbital; Secobarbital

1. Yes

2. No

3. I do not know / remember

Q8. Please choose the sex of your doctor.

1. Male

2. Female

Q9. Did your doctor look older than you?

1. Yes

2. No

Q10. Have you ever had any experience of not telling the truth to your doctor during the treatment?

1. Yes → please proceed to Q 11 & Q12
2. No → please proceed to Q13

Q11. About what did you not tell the truth? Please choose all applicable issues.

\*The order of the following choices of 1 - 6 was randomly generated for each participant.

1. Symptoms
2. Side effects
3. Adherence to prescribed medications
4. Daily activities of life
5. Intake of alcohol and illicit drugs
6. Figures such as temperature and body weight
7. Others



Q12. Please choose all applicable reasons why you did not tell the truth.

\*The order of the following choices of 1 – 8 was randomly generated for each participant.

1. *“I found it difficult to talk with my doctor”*
2. *“I found it embarrassing to tell the truth”*
3. *“I was confused”*
4. *“I thought my doctor would not take it seriously even if I told him/her”*
5. *“I could not trust my doctor”*
6. *“I did not want to bother my doctor”*
7. *“My doctor looked busy”*
8. *“If I told the truth, my doctor would likely suggest to me to take a sick leave or quit my job”*
9. Others

Q13. Have you ever decided not to buy antidepressant drugs at the pharmacy on purpose even though your doctor prescribed them?

1. Yes → please proceed to Q14
2. No → please proceed to Q15

Q14. Please choose all applicable reasons that you did not buy the prescribed drugs.

\*The order of the following choices of 1 – 5 was randomly generated for each participant.

1. *“My symptoms got better”*
2. *“I did not want to take medications”*
3. *“I could not afford medications / I did not wish to use money for medications”*
4. *“I was too busy to visit a pharmacy”*
5. *“My family or friends suggested to me not to take medications”*
6. Others

Q15. Have you ever adjusted the dose of prescribed antidepressant drugs without consulting your doctor?

1. Yes
2. No

Q16. Have you ever discontinued antidepressants without consulting your doctor?

1. Yes → please proceed to Q17 & Q18

2. No → please proceed to Q19

Q17. Please choose all applicable reasons why you discontinued antidepressants without consulting your doctor.

\*The order of the following choices of 1 – 10 was randomly generated for each participant.

1. *“I experienced side effects”*
2. *“I was afraid of the potential side effects”*
3. *“I was afraid of getting hooked on prescribed medications”*
4. *“Prescribed medications were not effective”*
5. *“I could not afford the medical bills”*
6. *“I was too busy to go to the hospital / clinic”*
7. *“My symptoms got better”*
8. *“My family or friends suggested to me to do so”*
9. *“I did not know for how long I should have kept taking antidepressants”*
10. *“My doctor prescribed multiple medications”*
11. Others

Q18. What happened after you quit taking antidepressants without consulting your doctor?

Side effects:

1. Diminished
2. No change
3. Worsened

Depressive symptoms:

1. Improved
2. No change
3. Worsened

Q19. Have you ever quit receiving the treatment for “depression” or “depressive state” without consulting your doctor?

1. Yes →please proceed to Q20
2. No →please proceed to Q21

Q20. Please choose all applicable reasons why you quit receiving the treatment without consulting your doctor.



\*The order of the following choices of 1 – 10 was randomly generated for each participant.

1. *“My symptoms got better”*
2. *“My symptoms did not improve even though I received treatment”*
3. *“I did not get along well with my doctor”*
4. *“My doctor did not listen to me very much”*
5. *“I could not afford the medical bills*
6. *“I was afraid that my neighbors would notice my visit to a psychiatric hospital/clinic”*
7. *“My family or friends suggested me not to go to a psychiatric hospital / clinic”*
8. *“I was too busy to go to the hospital / clinic”*
9. *“The hospital / clinic was in an inconvenient location”*
10. *“Waiting time was too long”*
11. *“I moved”*
12. *“I could not go out / I did not want to go out”*
13. *“I experienced side effects”*
14. Others

Q21. Have you ever changed clinics or hospitals where you received treatment for “depression” or “depressive state”?

1. Yes →please proceed to Q22
2. No →please proceed to Q23

Q22. Please choose all applicable reasons why you did so.

\*The order of the following choices of 1 – 10 was randomly generated for each participant.

1. *“My symptoms did not improve even though I received treatment”*
2. *“I do not get along well with my doctor”*
3. *“My doctor did not listen to me very much”*
4. *“Time spent with my doctor was too short”*
5. *“I could not afford the medical bills”*
6. *“My family or friends suggested to me to do so”*
7. *“The hospital / clinic was in an inconvenient location”*
8. *“Waiting time was too long”*
9. *“I moved”*
10. *“I experienced side effects”*

## 11. Others

Q23. Have you ever experienced any side effect from the antidepressant drug that you had received for the longest time (i.e. the antidepressant drug that you chose in Q5)?

1. Yes → please proceed to Q24
2. No → please proceed to Q28

Q24. Please choose all side effects that you have experienced.

\*The order of the following choices of 1 – 19 was randomly generated for each participant.

1. Headaches
2. Thirst / dry mouth
3. Fatigue
4. Dizziness
5. Constipation
6. Blurred vision
7. Tremor
8. Nausea

9. Appetite loss
10. Palpitation
11. Anxiety or tension
12. Insomnia
13. Sweating
14. Difficulty in urination
15. Sexual dysfunction (e.g., difficulty in erection and ejaculation, amenorrhea)
16. Flu-like symptoms
17. Drowsiness
18. Diarrhea
19. Weight gain
20. Others

Q25. Among the side effects that you checked in Q24, which annoyed you the most.

\*The order of the following choices of 1 – 19 was randomly generated for each participant.

1. Headaches
2. Thirst / dry mouth



3. Fatigue
4. Dizziness
5. Constipation
6. Blurred vision
7. Tremor
8. Nausea
9. Appetite loss
10. Palpitation
- 11 Anxiety or tension
12. Insomnia
13. Sweating
14. Difficulty in urination
15. Sexual dysfunction (e.g., difficulty in erection and ejaculation, amenorrhea)
16. Flu-like symptoms
17. Drowsiness
18. Diarrhea
19. Weight gain
20. Others

21. They did not annoy me

Q26. Have you ever reported the side effect that annoyed you the most (i.e., the side effect that you chose in Q25) to your doctor?

1. Yes → please proceed to Q28
2. No → please proceed to Q27

Q27. Please choose all applicable reasons why you did not report the side effect to your doctor.

\*The order of the following choices of 1 – 19 was randomly generated for each participant.

1. *“The side effect was easily tolerable”*
2. *“I did not notice that it was a side effect from the medication at that time”*
3. *“I could cope with it by myself”*
4. *“I found it embarrassing to tell”*
5. *“I expected that it would get better with time”*
6. *“My doctor did not ask me about side effects”*
7. *“I thought that even my doctor could not deal with it well”*

8. *"I thought it was inappropriate to tell my opinion to my doctor"*

9. *"I did not want to bother my doctor"*

10. *"The relationship with my doctor was not good"*

11. *"I missed a chance to report it"*

12. *"I had more important issues to discuss than side effects"*

13. Others

Q28. Which do you think is the most important profile (factor) of antidepressant treatment for "depression" or "depressive state"?

\*The order of the following choices of 1 – 10 was randomly generated for each participant,

1. Strong efficacy

2. Rapid onset of action

3. Fewer side effects

4. Good balance between its efficacy and tolerability

5. Low cost

6. Lower number of tablets

7. Lower frequency of dosing

8. Higher frequency of dosing
9. Good reputation from the public
10. Suggestion from family or friends
11. Others

Q29. Which do you think is the most important issue (factor) for “depression” or “depressive state” in terms of choice of a physician and therapeutic environment?

\*The order of the following choices of 1 – 9 was randomly generated for each participant.

1. Public reputation of hospital / clinic
2. Relationship with a doctor
3. Professional skills and experiences of a doctor
4. Location of hospital / clinic
5. Atmosphere of hospital / clinic
6. Opening hours
7. Behavior of receptionists
8. Behavior of nurses
9. Family’s or friends’ opinion

## 10. Others

Q30. Are / were you satisfied with the antidepressant that you take / had taken for the longest time (i.e., the antidepressant that you chose in Q5)?

1. Very much satisfied
2. Satisfied
3. Not satisfied or dissatisfied
4. Dissatisfied
5. Very much dissatisfied

Q31. Which do you think is the most important factor to continue treatment for “depression” or “depressive state”?

\*The order of the following choices of 1 – 6 was randomly generated for each participant.

1. Improvement of depressive symptoms
2. Lack of side effects
3. Good relationship with doctor
4. Low cost

5. Location of clinic / hospital

6. Short waiting time

7. Others

Q32. What do you think would make patients feel free to tell the truth to their doctors during treatment for “depression” or “depressive state”?

\*The order of the following choices of 1 – 3 was randomly generated for each participant.

1. Providing an environment where patients and doctors can freely discuss issues

2. Communication and explanation, using letters or memos

3. Doctors spend more time with each patient

4. I do not think there is any solution since everyone would have something that they did not want to talk about.

5. Others

Q33. How much did your doctor explain about the following issues?

Diagnosis and characteristics of the illness:

1. They explained them very much in detail

2. They explained them to some extent
3. They explained them a little
4. They did not explain them at all
5. I do not know / I do not remember

Medications:

1. They explained them very much in detail
2. They explained them to some extent
3. They explained them a little
4. They did not explain them at all
5. I do not know / I do not remember

Treatment plan:

1. They explained it very much in detail →please proceed to Q34
2. They explained it to some extent →please proceed to Q34
3. They explained it a little →please proceed to Q34
4. They did not explain it at all →please proceed to Q35
5. I do not know / I do not remember →please proceed to Q35

Q34. Did your doctor provide only one option or multiple options?

1. She / He provided only one option
2. She / He provided multiple options

Q35. Whose opinion was reflected the most on the final decision of treatment when you received treatment?

1. Your doctor
2. You
3. Both of you and your doctor
4. Others

Q36. How much were (are) you satisfied with the relationship or communication with your doctors for the treatment of “depression” or “depressive state”?

1. Very much satisfied
2. Satisfied
3. Not satisfied or dissatisfied
4. Dissatisfied
5. Very much satisfied



Q37. How do you wish to decide your treatment plan when you receive treatment of “depression” or “depressive state” in the future? Please choose one of the choices for the following two conditions.

If your symptoms are severe,

1. I want my doctor to decide it
2. I want to decide it by myself
3. I want to decide it with my doctor after sufficient discussion with him / her
4. None of the above

If your symptoms are mild,

1. I want my doctor to decide it
2. I want to decide it by myself
3. I want to decide it with my doctor after sufficient discussion with him / her
4. None of the above

Q38. What is your highest academic qualification? If you are a student, please choose one that you currently belong to.

1. Junior high school
2. High school

3. Career college
4. Two-year college
5. University / graduate school
6. Others

Q39. Please choose your annual household income.

1. JPY < 2 million
2. JPY 2 - 4 million
3. JPY 4 - 6 million
4. JPY 6 - 8 million
5. JPY  $\geq$  8 million
6. I do not know / I do not want to answer

1 million yen : equivalent to approximately USD 12,200 (in 2011, subject to change due to the exchange rate)

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