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## Comparison of German and Japanese general practitioners' awareness of suicide and attitudes toward patients with suicidal ideation.

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## Abstract

The authors designed a questionnaire to investigate the differences in German and Japanese general practitioners' (GP) awareness of suicide and attitudes toward patients with suicidal ideation in their respective societies. The purpose of this study was to obtain insights leading to a better means of suicide prevention in primary care in Japan. The background for conducting the study was declining suicides in the past 20 years and the lower suicide rate in Germany compared with the present situation in Japan, where the number of suicides has in recent years continued to exceed 30,000, resulting in a suicide rate approximately 2 times higher than that in Germany. The questionnaire was randomly mailed to GPs in Okayama-Prefecture (western Japan) and Hamburg-State (northern Germany) and was collected in the same way. The patterns of answers were compared between the 2 countries, and the differences were statistically analyzed. Japanese GPs seem to have a lower will to prevent suicide in daily practice compared to German GPs and a great lack of knowledge about treatment of suicidal patients. These observations suggest that improving GPs' interest in the problem of suicide and providing training programs for the treatment of patients with suicidal intentions might be a means of achieving better suicide prevention in Japan.

**KEYWORDS:** suicide prevention, general practitioner, Japan, Germany

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Original Article

## Comparison of German and Japanese General Practitioners' Awareness of Suicide and Attitudes toward Patients with Suicidal Ideation

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The authors designed a questionnaire to investigate the differences in German and Japanese general practitioners' (GP) awareness of suicide and attitudes toward patients with suicidal ideation in their respective societies. The purpose of this study was to obtain insights leading to a better means of suicide prevention in primary care in Japan. The background for conducting the study was declining suicides in the past 20 years and the lower suicide rate in Germany compared with the present situation in Japan, where the number of suicides has in recent years continued to exceed 30,000, resulting in a suicide rate approximately 2 times higher than that in Germany. The questionnaire was randomly mailed to GPs in Okayama-Prefecture (western Japan) and Hamburg-State (northern Germany) and was collected in the same way. The patterns of answers were compared between the 2 countries, and the differences were statistically analyzed. Japanese GPs seem to have a lower will to prevent suicide in daily practice compared to German GPs and a great lack of knowledge about treatment of suicidal patients. These observations suggest that improving GPs' interest in the problem of suicide and providing training programs for the treatment of patients with suicidal intentions might be a means of achieving better suicide prevention in Japan.

**Key words:** suicide prevention, general practitioner, Japan, Germany

Suicide takes over 1 million lives per year worldwide, and attempted suicide is estimated to occur up to 40 times more frequently [1]. Therefore, preventing suicide is without a doubt an important issue in health care for many societies [2,

3]. In Japan, the suicide rate rose abruptly by 10,000 cases (over 30%) in the year 1998. The numbers have continued to exceed 30,000 in recent years, reaching almost 35,000 victims in the year 2003 with a raw suicide rate of 27 per 100,000 (National Police Agency Japan, <http://www.npa.go.jp/toukei/>), in Japanese). Suicide has escalated to a serious social problem in Japan. Although there may be some peculiar understandings of suicide due to the cultural

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framework in Japan [4-6], its numbers might be reduced if guidelines like WHO's call for suicide prevention [1] are recognized and put into practice. According to the WHO, early identification of persons with suicidal ideation and their treatment are important tasks in preventive medicine [1]. On the other hand, most victims visit a physician in a phase when the suicidal thought develops (so called "presuicidal syndrome") [7-11]. It has also been reported that many of these patients see a general practitioner (GP), not a psychiatrist [12-14]. This means that GPs exist in one of the key positions in preventing suicide. With this in mind, and when it is taken into consideration that the suicide rate in Germany is much lower than in Japan (National Police Agency Japan, <http://www.npa.go.jp/toukei/>), in Japanese, Federal Statistical Office Germany, [http://www.destatis.de/e\\_home.htm](http://www.destatis.de/e_home.htm)), in German), the difference in physicians' actual knowledge of and attitude toward the problem of suicide between these countries may provide a clue to a better means of preventing suicide. We therefore investigated the GPs' awareness of suicide and attitude towards suicidal patients in both countries, and the role of Japanese GPs in preventing suicide in their own country is discussed herein.

## Materials and Methods

A questionnaire with 22 questions was designed to investigate physicians' awareness of suicide and their attitudes toward suicidal patients in their daily practice. Information about patients was excluded from the questions to avoid ethical problems. The questions and information regarding the consistency between Japanese and German versions are provided in Table 1. The questionnaires were mailed to GPs both in Okayama-Prefecture (western Japan) and Hamburg-State (northern Germany), which are similar administrative districts in population (1,952,000 in Okayama-Prefecture and 1,734,000 in Hamburg-State, 2003) and total number of deaths (17,700 in Okayama-Prefecture and 18,100 in Hamburg-State, 2003) (Federal Statistical Office Germany, [http://www.destatis.de/e\\_home.htm](http://www.destatis.de/e_home.htm)), in German, Health statistics Okayama-Prefecture, [http://www.pref.okayama.jp/hoken/hohuku/toukei/toukei\\_1-1.htm](http://www.pref.okayama.jp/hoken/hohuku/toukei/toukei_1-1.htm)), in Japanese).

In Okayama Prefecture the number of doctors in private practice expressing internal medicine as their expertise was determined to be 774 based on the list of members of the Prefectural Medical Association, which consists of 24 small divisions (7 urban and 17 regional) associations. The questionnaire was mailed to 285 doctors (251 males and 31 females). Of these, 123 were selected by their names listed on odd pages in the register of 2 urban divisions, and the other 162 were GPs of 9 regional divisions (2 from each northern, southern, eastern, and middle division, and 1 from the western part of the prefecture).

In Hamburg-State, 628 GPs ("Hausarzt" in German) were registered with the Medical Association of Hamburg. The questionnaire was mailed to 356 GPs (228 males and 128 females) whose last names ranged from L to Z.

The questionnaire was collected by mail voluntarily and anonymously to avoid ethical problems with responders. The patterns of the obtained answers were compared between the 2 countries, and the significance of the difference was investigated by chi-square test. The effects of age, gender, nationality, and period of practice variables were estimated by linear regression analysis. For the statistical analysis, commercially available software (Dr. SPSS II. For Windows, Tokyo, Japan, released 2002) was used. The data were collected and analyzed in 2004.

## Results

**General features of the answering general practitioners.** The numbers of questionnaires recovered from general practitioners were 134 (response rate: 47%) in Japan and 126 (response rate: 36%) in Germany. The age of the answering physicians in Japan was generally higher than that of those in Germany, with an average of 60.2 in Japan and 49.8 in Germany. The ratio of males to females was approximately 16:1 in Japan compared to 6:4 in Germany. Relatively longer periods of practice were observed in Japan. The structures of age, gender, and period of practice are summarized in Table 2.

### **Pattern of answers in Japan and Germany.**

Differences in the answer patterns were analyzed in 11 of the 22 questions, which can reflect the following 2 viewpoints: one is an interest in suicide and

Table 1 List of the analyzed questions and their consistency between Japanese and German

a Japanese version	
Q 1	あなたは、患者の精神状態について問診することがありますか。 a 必ずする                      b しばしばする                      c あまりしない                      d しない
Q 2	あなたは、患者の精神状態についての問診に平均でどのくらい時間をかけますか。 a 3分以内                      b 3-5分                      c 5-10分                      d 10分以上
Q 3	あなたは、患者が精神的に不安定と感じた時には、患者の希死念慮の有無を問診しますか。 a 必ずする                      b しばしばする                      c あまりしない                      d しない
Q 4	あなたは、患者の希死念慮を聞き出す場合に、“自殺”、“死”などの直接的な言葉を使いますか。 a 必ずする                      b しばしばする                      c あまりしない                      d しない
Q 5	あなたは、患者の希死念慮を聞き出す場合に、“自殺”、“死”などの直接的な言葉を使うことに、治療上の効果があると思いますか。 a 十分ある                      b ある程度ある                      c あまりない                      d 全くない
Q 6	あなたは、希死念慮のある患者は、自らそのことを医師に話すと思いますか。 a 全ての患者が話すと思う                      b 多くの患者が話すと思う                      c 話す患者は少ないと思う                      d 話す患者はいないと思う
Q 7	あなたは、希死念慮のある患者に遭遇したことがありますか。 a よくある                      b 経験はある                      c ない
Q 8	あなたは、患者に希死念慮がある判明した時に、その患者を精神科医へ紹介しますか。 a 必ずする                      b しばしばする                      c あまりしない                      d しない
Q 9	あなたは、希死念慮のある患者を精神科医に紹介した場合、患者の事後経過についての問い合わせを定期的(月1回程度以上)に行いますか。 a 全例について行う                      b 多くの場合行う                      c 時に行う                      d しない
Q10	あなたは、希死念慮のある人の治療について知識を持っていると思いますか。 a 十分持っている                      b ある程度持っている                      c あまり持っていない                      d ほとんど持っていない
Q11	あなたは、卒後に自殺問題に関連した生涯研修を受けましたか。 a できるだけ受けるようにした                      b 受けたことはある                      c いいえ
b German version	
Q 1	Befragen Sie Ihre Patienten zu ihrem seelischen Zustand? a Immer                      b Häufig                      c Selten                      d Nein
Q 2	Wieviel Zeit nehmen Sie sich durchschnittlich für den seelischen Zustand eines Patienten? a Bis zu 3 Minuten                      b 3-5 Minuten                      c 5-10 Minuten                      d Mehr als 10 Minuten
Q 3	Erfragen Sie bei nach Ihrer Meinung psychisch unausgewogenen Patienten eine mögliche suizidale Absicht? a Immer                      b Häufig                      c Selten                      d Nein
Q 4	Benutzen sie direkte Wörter (z.B.Suizid, Selbstmord, Selbsttötung oder Tod), wenn Sie mit einem Patienten versuchen, über eine suizidale Absicht zu sprechen? a Immer                      b Häufig                      c Selten                      d Nein
Q 5	Ist es Ihrer Meinung nach therapeutisch sinnvoll, diese Wörter zu verwenden? a Gut ausreichend                      b Zu einem gewissem Grade                      c Nicht so sehr                      d Nein
Q 6	Sind Sie der Meinung, daß suizidgefährdete Patienten von sich aus bei einem Arzt eine suizidale Absicht ansprechen würden? a alle                      b Ja, viele                      c Eher wenige                      d Nein, keiner
Q 7	Haben Sie während Ihrer ärztlichen Tätigkeit bei Patienten bereits eine Suizidgefahr bemerkt? a Ja, schon oft                      b Ja, aber selten                      c Nein
Q 8	Überweisen Sie den Patienten an einen Facharzt für Psychiatrie (Psychiater), wenn Sie bei ihm eine bestehende Suizidgefahr feststellen? a Immer                      b Häufig                      c Selten                      d Nein
Q 9	Verfolgen Sie für sich den weiteren Verlauf eines Patienten, den Sie wegen Suizidgefahr an einen Facharzt für Psychiatrie (Psychiater, Psychologe) überwiesen haben? a In allen Fällen                      b In vielen Fällen                      c In manchen Fällen                      d In keinen Fällen
Q10	Fühlen Sie sich für den Umgang mit suizidgefährdeten Patienten therapeutisch ausreichend genug geschult? a Durchaus genug                      b Bis zu einem gewissen Grade schon                      c Eher nicht so sehr                      d Eigentlich nicht
Q11	Haben Sie nach Ihrem Universitätsabschluss bereits an Fortbildungen zum Thema "Suizid" teilgenommen? a Ja, so oft wie möglich                      b Ja, aber eher selten                      c Nein

Table 2 Objectives of responding general practitioners

		Japan	Germany
Answers		134	126
Gender	male	126	77
	female	8	48
Age	range	37-88	30-82
	average	60.2	49.8
Practice Exp.	≤ 10 years	26	51
	20 years	48	50
	30 years	22	20
	≥ 31 years	40	3

will to prevent it; the other is knowledge of the treatment of patients with suicidal ideation. Table 3 shows the pattern of answers in both countries and the results of the chi-square test. With the exception of Q6 and Q8, in all questions the differences between the countries were statistically significant, with  $p$ -values smaller than 0.001. When the samples stratified by gender were analyzed by chi-square test, males showed significant differences ( $p < 0.001$ ) between Japan and Germany in all questions with the same exceptions, while no significant differences were observed in female samples in any of the ques-

Table 3 Comparative analysis of answer patterns between Germany and Japan

		Japan (n = 134)	Germany (n = 126)	$p$ value
Q 1	Do you ask your patients about their mental condition?			
	always & often	68 (51.9%)	115 (92.0%)	< 0.001
	rarely & no	63 (48.1%)	10 ( 8.0%)	
Q 2	How much time do you spend on an average ascertaining the mental condition of your patient?			
	under 3 minutes & 3-5 minutes	78 (70.3%)	35 (30.2%)	< 0.001
	5-10 minutes & over 10 minutes	33 (29.7%)	81 (69.8%)	
Q 3	Do you ask patients, who in your judgment are mentally unstable, about a possible suicidal intention?			
	always & often	29 (23.0%)	91 (74.0%)	< 0.001
	rarely & no	97 (77.0%)	32 (26.0%)	
Q 4	Do you use direct words (suicide, death etc.) when you try to talk with a patient about a possible suicidal intention?			
	always & often	26 (19.4%)	81 (64.8%)	< 0.001
	rarely & no	108 (80.6%)	44 (35.2%)	
Q 5	Do you think that the use of such words has a therapeutic effect?			
	enough & up to a certain degree	48 (36.9%)	101 (82.1%)	< 0.001
	not so much & no	82 (63.1%)	22 (17.9%)	
Q 6	Do you think that a patient with suicidal thoughts will initiate discussion about this problem?			
	yes, all of them & yes, many of them	17 (12.8%)	17 (13.6%)	0.846
	no, not so many & no, no one	116 (87.2%)	108 (86.4%)	
Q 7	Did you discover suicidal thoughts among your patient in your medical practice?			
	yes, many times & yes, but rarely	101 (75.4%)	121 (96.8%)	< 0.001
	no	33 (24.6%)	4 ( 3.2%)	
Q 8	Do you refer patients with suicidal thoughts to a psychiatrist?			
	always & often	115 (87.1%)	111 (93.3%)	0.103
	rarely & no	17 (12.9%)	8 (6.72%)	
Q 9	Do you check the patients' progress after referring him/her to a psychiatrist due to his/her suicidal ideation?			
	always & often	23 (17.8%)	105 (86.8%)	< 0.001
	rarely & no	106 (82.2%)	16 (13.2%)	
Q10	Do you feel sufficiently trained to handle patients with acute suicidal tendencies?			
	enough & up to a certain degree	28 (21.2%)	70 (55.6%)	< 0.001
	not enough & not at all	104 (78.8%)	56 (44.4%)	
Q11	Did you participate in seminars or training programs about "suicide" during your career?			
	yes, as often as possible & yes, but rarely	25 (19.4%)	80 (64.0%)	< 0.001
	no	104 (80.6%)	45 (36.0%)	

tions. In the analysis of samples stratified by age groups (under 50 y.o., 51–60 y.o., and over 61 y.o.), significant differences between the countries ( $p > 0.05$ ) were also observed in all groups in all questions other than Q6 and Q8, with only 1 exception of Q4 in the age group over 61 y.o. In all questions, nationality was the overwhelmingly important factor affecting the answer pattern.

### Discussion

SUPRE (the name of the project for suicide prevention in WHO) states that the care of patients with suicidal thoughts as well as diagnosis of such ideas is an important part of a physician's responsibility [1]. Some have argued that the GP should be fit enough to identify patients with suicidal thoughts [13, 15–17] and possess sufficient knowledge of the appropriate treatment if acute danger to a patient's life exists [15–18].

In the identification of patients with suicidal ideation, it is indispensable for GPs to have an interest in suicide and the will to prevent it, which could be expressed as an awareness of suicide. On the other hand, sufficient knowledge of treatment is an essential factor in the appropriate attitude toward suicidal patients. We therefore assessed the patterns of the obtained answers from these 2 viewpoints, and clues to improving suicide prevention in Japan are discussed herein based on the observed differences between Japan and Germany.

Although the low response rates limited the study, we do believe it possible to discuss the possibility of improving suicide prevention in Japan, as the responders appear to represent the investigated population, *e.g.* the ratio of males to females among responders is similar to the actual status of the population. In the present study, female responders showed no significant differences between Japan and Germany. However, it was thought that the countries could be compared using the total number of responders because the number of female responders in Japan was a great minority and nationality was the overwhelmingly salient factor affecting the pattern of the answers according to multiple linear regression analysis.

***GPs' interest in suicide and will to prevent it.*** When we assessed the answers to Q1 and Q2,

the results suggested that German GPs may have more interest in the problem of suicide and stronger will to prevent it than Japanese. Almost all German GPs reportedly ask patients about their mental condition, while only approximately half of the questioned GPs in Japan report doing so. There was also a significant difference in the amount of time German and Japanese GPs reportedly spend for medical interviews on the mental condition of patients. Seventy percent of physicians in Germany reported spending more than 5 min for this purpose, while in Japan 70% reportedly spend less than 5 min, and GPs using more than 10 min are a very small minority compared with the 30% in Germany.

When the answer to Q3 was analyzed together with those of Q6 and Q7, we observed the same tendency. Most of the physicians did not expect the patients to start talking about their suicidal thoughts by themselves, and more than 3/4 of them reported encountering patients with suicidal thoughts during their careers in both countries. These results remind us that most GPs identify such conditions of their patients through the medical interview. Indeed, most German GPs ask patients about suicidal ideas when their mental condition seems to be disturbed. However, most Japanese GPs reportedly do not ask patients about their suicidal thoughts. This means that Japanese GPs do not look sufficiently closely to make an accurate diagnosis of a patient's mental condition, even if they do suspect suicidal ideation.

The analyses described above seem to indicate a lower level of interest in the mental condition of patients and a weaker will to prevent suicide among Japanese GPs than among German. We must, of course, take into consideration that the difference in the pattern of answers reflects factors other than the interest of GPs in the problem of suicide. For example, differences in the system of national health insurance are also thought to be a factor. GPs must examine a very large number of patients in a short time in the present Japanese system, and there may be no scope for spending enough time in the medical interview to evaluate a patient's mental condition. The traditional non-linguistic communication in Japan may also effect the answers of GPs in this country, that many of them do not ask the patients about their mental condition. However, it would be also meaningful to notice the many previously reported

researches on this subject from other countries. It is said to be important in preventing suicide to pay close attention to the mental condition of patients [18, 19]. Taking the initiative and addressing the patients' suicidal thoughts is also emphasized as being part of the role of a GP [9, 13, 16, 21]. Identification of suicidal patients or estimation of the likelihood that patients will kill themselves is regarded as an important function of any general practitioner [1, 9, 13, 18, 19, 22]. If Japanese GPs have less interest in the mental condition of patients and less will to prevent suicide, the result would be fewer identifications of suicidal risk, possibly leading to the high suicide rate in this country.

Answers to another question in the present investigation revealed the same possibility. In both countries, more than 85% of GPs reported referring patients with a mental disturbance to a psychiatrist. However, Japanese GPs who always carry out ongoing checkups of the mental conditions of their patients after referring them to psychiatrists are very rare, while most German doctors reportedly carry out such checkups. This difference is thought to indicate whether or not GPs trust their patients' fates to the psychiatrists alone.

If this behavior reflects the lower level of interest in the problem of suicide, the level of interest in the problem of suicide among Japanese GPs is indeed low. Although we must again take into account all possible factors causing the differences between the 2 countries, it should also be necessary to consider the relationship between the observed difference in the pattern of answers and the difference in suicide rates in Japan and Germany. If Japanese GPs' interest in the problem of suicide and will to prevent it are one of the factors causing the observed difference, improvements in this area would become a helpful measure to attain effective suicide prevention at the preliminary stage of medical care. Hruby argues that patients have more trust in physicians they have known for a long time and thus will receive better care from them [23].

***GPs' knowledge of the treatment of suicidal patients.*** As Hirschfeld and other authors have pointed out, treatment of patients with suicidal thoughts is also an important role of GPs [12, 18, 24] and proper knowledge to prevent suicide has been reported to be the prerequisite issue for the

appropriate treatment of suicidal patients [1, 15, 19, 21, 22]. It may therefore be possible to improve suicide prevention in Japan if the difference in the knowledge of treatment of suicidal patients between Germany and Japan is clarified.

In some European literature, it is reported that the use of a direct word such as "death" or "suicide" is effective in determining the presence of suicidal thoughts/possible suicide risk and also has therapeutic effects on suicidal patients [1, 16, 22]. According to our survey, clear differences are present between these 2 countries regarding this point. Less than 1/5 of the responding GPs in Japan reported used direct language in their conversation to diagnose the suicidal ideation of the patient, while nearly 2/3 answered positively in Germany, and among them 40% always used such words. More than 4/5 of German GPs replied positively regarding the use of direct language having a therapeutic effect on suicidal ideation among patients. In contrast, more than 60 % of GPs in Japan reported seeing little or no therapeutic effect in the use of direct words.

Again, we must pay close attention to the cultural backgrounds of responders: the doctor-patient relationship may depend on the traditional non-linguistic communication in Japan. As such, the pattern of Japanese GPs' answers may not reflect the level of knowledge of suicide. However, we should at the same time recognize that suicidal ideation is not a cultural but a psychiatric symptom. If the results obtained in this study reveal a lack of knowledge about suicide prevention among Japanese GPs when compared to German GPs, and when the undeniable difference in the suicide rates in Japan and Germany is taken into consideration, efforts to increase knowledge of the problem of suicide, as has been reported in the European literature, in GPs may be a helpful measure to prevent suicide in Japan.

In the present study it also became clear that offering opportunities to GPs to increase their knowledge of the treatment of suicidal patients might reduce the number of suicides in Japan. According to our investigation, more than half of the responding German GPs believe that their knowledge of suicide is sufficient or sufficient up to a certain degree, and approximately 65% report having participated in training programs for suicide prevention during their

career. In contrast, only 18% of the Japanese GPs report having participated in such programs, and Japanese GPs in general appear to be significantly less confident in dealing with suicidal patients than German GPs. These findings suggest that GPs can obtain knowledge and confidence regarding the treatment of suicidal patients through participation in training programs. Furthermore, there are only a few such programs at present in Japan, as almost all (99%) Japanese GPs were reportedly aware of (This result is not shown). Therefore, more training programs for GPs regarding the problem of suicide may also become a measure for suicide prevention in Japan.

As stated above we have observed a clear difference in GPs' awareness of and attitude toward suicide between Japan and Germany. Differences in the systems of health insurance and cultural background might in part explain the observed differences. Differences in the actual prevalence of and treatment rates for psychiatric disorders could also be a factor. Because those rates were reported to be higher in Germany than in Japan [25], German GPs may therefore have more chances than Japanese GPs to examine patients with mental disorders, thus affecting the pattern of answers in the present investigation. However, it might also be possible that Japanese GPs have a lower level of interest in and knowledge of suicide compared with German GPs. Therefore, efforts to improve GPs' interest in the problem of suicide as well as to offer GPs opportunities to acquire knowledge regarding the treatment of suicidal patients might contribute to suicide prevention in Japan.

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