

### 2.8. Literature review of previous studies in other countries

We conducted a literature review with PubMed to compare our findings with previous studies in other countries. We identified the prevalence proportions of suicide attempters in the ED from selected articles identified by the literature review.

## 3. Results

### 3.1. Searches and article selection

The search strategy identified 3338 records for potential inclusion in the study (Fig. 1): PubMed ( $n=171$ ), PsycINFO ( $n=28$ ), CINAHL ( $n=5$ ), ICHUSHI ( $n=2784$ ), CiNii ( $n=346$ ), and hand-searching ( $n=4$ ). After reviewing the abstracts, the full texts of

205 articles were obtained for further assessment of their eligibility. Eventually, 70 studies that were determined to be eligible were included in the meta-analysis.

### 3.2. Prevalence of suicide attempters

We identified a total of 70 studies that described the number of suicide attempters in the ED. The pooled prevalence proportion of suicide attempters in the ED was 4.7% (95% CI=4.0–5.6) for the 70 studies, which included 1,319,848 individuals in the ED (Table 1). The heterogeneity was  $I^2=99.8\%$  (95% CI=99.8–99.8). The prevalence proportion of suicide attempters in the 70 studies did not vary by hospital type or urban density. The pooled prevalence proportion of suicide attempters who died at the ED was 0.7% (95% CI=0.5–0.8) for 50 studies, which included 997,517 individuals in the ED. The heterogeneity was  $I^2=98.4\%$  (95% CI=98.3–98.5).

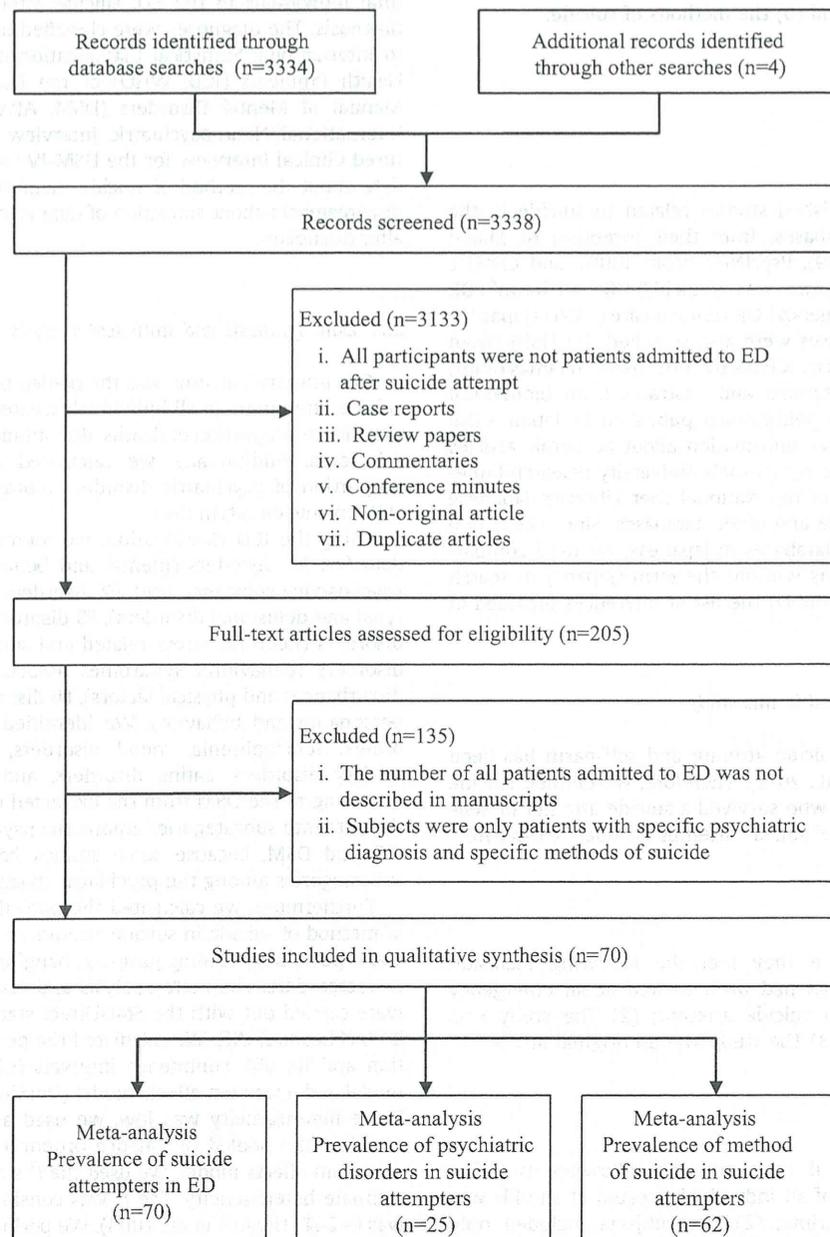


Fig. 1. Flowchart of the process of selecting studies for inclusion.

**Table 1**  
Pooled prevalence of suicide attempters in the ED.

	Number of studies	Pooled prevalence (95% CI)	Heterogeneity (95% CI)
Suicide attempters	70	4.7% (4.0–5.6)	99.8% (99.8–99.8)
Delayed death <sup>a</sup>	50	0.7% (0.5–0.8)	98.4% (98.3–98.5)

<sup>a</sup> Delayed death: suicide attempters who died after their admission to the ED.

**Table 2**  
Pooled prevalence of psychiatric disorders among suicide attempters.

	Number of studies	Pooled prevalence (95% CI)	Heterogeneity (95% CI)
<b>ICD<sup>a</sup></b>			
F1	14	4% (3–4)	0.0% (0–47.4)
F2	19	13% (12–14)	37.9% (0–63.1)
F3	19	30% (27–32)	78.8% (66.4–85.2)
F4	19	27% (24–31)	91% (87.9–93.0)
F5	5	– <sup>c</sup>	– <sup>c</sup>
F6	19	13% (11–16)	89.5% (85.6–92.0)
<b>DSM<sup>b</sup></b>			
Substance-related disorders	4	14% (6–26)	96.1% (93.5–97.4)
Schizophrenia	6	19% (15–22)	79.4% (44.1–88.9)
Mood disorders	6	35% (24–46)	96.3% (94.5–97.2)
Adjustment disorders	4	28% (17–40)	96.7% (94.8–97.7)
Anxiety disorders	4	– <sup>c</sup>	– <sup>c</sup>
Eating disorders	2	– <sup>c</sup>	– <sup>c</sup>
Personality disorders	5	41% (24–60)	98.5% (98.0–98.8)

<sup>a</sup> F1: mental and behavioral disorders due to psychoactive substance use, F2: schizophrenia, schizotypal and delusional disorders, F3: mood disorders, F4: neurotic, stress-related and somatoform disorders, F5: behavioral syndromes associated with physiological disturbances and physical factors, F6: disorders of adult personality and behavior.

<sup>b</sup> DSM included the MINI and SCID-I, II.

<sup>c</sup> We did not calculate pooled prevalence proportion because of the small number of studies and the small sample sizes.

Fig. 1 of Supporting information shows the forest plot for the proportion of suicide attempters by study.

### 3.3. Psychiatric disorders among suicide attempters

We identified a total of 25 studies that described the prevalence proportion of psychiatric disorders (Fig. 1). There were 19 studies that used the ICD and 6 studies that used the DSM. Table 2 shows the pooled prevalence proportion and heterogeneity for the studies.

The top portion of Table 2 shows the pooled prevalence and heterogeneity measures for the studies that used the ICD. We identified 14 studies that included 7114 individuals in the ED with ICD-F1 disorders. As seen in Table 2, the pooled prevalence proportion of ICD-F1 disorders was 4%. See Supporting information for the forest plots for the proportion of ICD psychiatric disorders by study.

The next three rows of Table 2 show the pooled prevalence and heterogeneity for studies reporting data on ICD disorders F2–F4 in the ED. The measures were derived from 19 studies, which included 8633 individuals. The pooled prevalence proportions for these three ICD disorders were: 13% for F2, 30% for F3, and 27% for F4. As seen in the table, their heterogeneities were, respectively, 37.9%, 78.8% and 91%.

We identified 5 studies with ICD-F5 disorders, which included 1135 individuals in the ED. However, we did not calculate the pooled prevalence proportion of F5 disorders because the total

number of cases with these disorders was rather small. The next row of Table 2 shows the pooled prevalence and heterogeneity for ICD-F6 disorders, which were derived from the same 19 studies as those for F2–F4.

Four of the six studies using the DSM included substance-related disorders among 1262 individuals in the ED. The pooled prevalence proportion was calculated to be 14% and the heterogeneity was 96.1%. See Supporting information for the forest plots for the proportion of DSM psychiatric disorders by study.

The pooled prevalence proportions of schizophrenia and mood disorders were 19%, and 35%, respectively, based on 6 studies that included 2352 individuals in the ED. The pooled prevalence proportion was nearly as high for adjustment disorders (28%), based on 4 studies that included 1994 individuals. The heterogeneity for these studies ranged from 79.4% to 96.7%.

We identified 2 studies that included eating disorders among 475 individuals and 4 studies including anxiety disorders among 1565 individuals in the ED. We did not calculate the pooled prevalence proportion of anxiety disorders or eating disorders because the total number of cases with these disorders was rather small.

Five studies using the DSM included patients with personality disorders among 2149 individuals in the ED. The pooled prevalence proportion of personality disorders was 41%, and the heterogeneity for the studies was 98.5%.

### 3.4. Methods of suicide in suicide attempters

We identified a total of 62 studies that described methods of suicide (Fig. 1). The pooled prevalence proportion of poisoning was 52% for the 62 studies including 13,801 individuals in the ED with a heterogeneity of  $I^2=92.9%$  (Table 3). The pooled prevalence proportion of cutting was 18% for 57 studies that included 12,097 individuals, and the pooled prevalence proportion of jumping was 12% for 58 studies that included 12,278 individuals.

The pooled prevalence proportion for hanging was 7%, based on 52 studies including 11,134 individuals in the ED, and the proportion for burning was 4%, based on 33 studies including 7963 individuals. See Supporting information for the forest plots for the proportions of suicide methods by study.

### 3.5. Previous studies in other countries

We identified only one study that described the prevalence proportion of suicide attempters in all individuals in the ED (Doshi et al., 2005) (Table 4). We also identified two studies using the ICD (Doshi et al., 2005; Bilén et al., 2011) and three studies using the DSM for suicide attempters in the ED (Bi et al., 2010; Elliott et al., 1996; Hur et al., 2008). Finally, we identified six studies that reported the method of suicide (Doshi et al., 2005; Bilén et al., 2011; Bi et al., 2010; Elliott et al., 1996; Lee et al., 2012; Bergen et al., 2010).

**Table 3**  
Pooled prevalence of method of suicide among suicide attempters.

Method	Number of studies	Pooled prevalence (95% CI)	Heterogeneity (95% CI)
Poisoning	62	52% (48–55)	92.9% (91.8–93.7)
Cutting	57	18% (16–19)	80.7% (75.5–84.3)
Jumping	58	12% (10–14)	92.3% (91.0–93.3)
Hanging	52	7% (6–9)	86.5% (83.4–88.8)
Burning	33	4% (3–5)	75.5% (65.0–81.7)

Table 4

Review of studies in other countries on the prevalence proportion of suicide attempters, psychiatric disorders, and method of suicide.

Study	Country	Number of participants	SA <sup>a</sup> (%)	ICD <sup>b</sup> (%)						DSM <sup>c</sup> (%)						Method <sup>d</sup> (%)					
				F1	F2	F3	F4	F5	F6	SRD	Sz	MD	AdjD	AnxD	ED	PD	Poison	Cut	Jump	Hang	Burn
Doshi et al., 2005	U.S.	513,600,000	0.4	9 <sup>e</sup>	-	18 <sup>f</sup>	-	-	-	-	-	-	-	-	-	-	68	20	-	<1	-
Bilén et al., 2011	Sweden	1524	-	18	6	29	18	-	26	-	-	-	-	-	-	-	86	12	-	-	-
Bi et al., 2010	China	239	-	-	-	-	-	-	3	8	44	5	11	-	-	-	92	-	-	-	-
Hur et al., 2008	Korea	344	-	-	-	-	-	-	-	11	79 <sup>g</sup>	3	-	-	1	-	-	-	-	-	-
Elliott et al., 1996	U.S.	97	-	-	-	-	-	-	30 <sup>h</sup>	19 <sup>i</sup>	5	39 <sup>g</sup>	26	-	34 <sup>j</sup>	72	15	4	2	1	-
Lee et al., 2012	Korea	2996	-	-	-	-	-	-	-	-	-	-	-	-	-	69	16	3	6	-	-
Bergen et al., 2010	U.K.	44330	-	-	-	-	-	-	-	-	-	-	-	-	-	78	15	-	-	-	-

<sup>a</sup> SA: suicide attempters.<sup>b</sup> F1: mental and behavioral disorders due to psychoactive substance use, F2: schizophrenia, schizotypal and delusional disorders, F3: mood disorders, F4: neurotic, stress-related and somatoform disorders, F5: behavioral syndromes associated with physiological disturbances and physical factors, and F6: disorders of adult personality and behavior.<sup>c</sup> SRD: substance-related disorders, Sz: schizophrenia, MD: mood disorders, AdjD: adjustment disorders, AnxD: anxiety disorders, ED: eating disorder, and PD: personality disorders<sup>d</sup> Poison: poisoning, Cut: cutting, Jump: jumping, Hang: hanging, and Burn: burning.<sup>e</sup> This score is the percentage of alcohol abuse only.<sup>f</sup> This score is the percentage of only ICD-9-CM code 311.<sup>g</sup> This score is the percentage of major depressive disorder and bipolar disorders only.<sup>h</sup> This score is the percentage for only alcohol abuse or dependence.<sup>i</sup> This score is the percentage for only drug abuse or dependence.<sup>j</sup> This score is the percentage for only borderline personality disorders and antisocial personality disorders.

## 4. Discussion

### 4.1. Prevalence of suicide attempters

Our study found that the pooled prevalence proportion of suicide attempters was 4.7% among all individuals in the ED in Japan, using systematic and comprehensive procedures. On the other hand, the Centers for Disease Control and Prevention (CDC) reported that attempted suicide and self-inflicted injury accounted for 0.4% of all ED visits in the US (Doshi et al., 2005). The pooled prevalence proportion calculated in our study was higher than that reported by CDC. This difference might reflect the difference in suicide rates between Japan and the US. The suicide rate in the US (14 per 100,000 population) is rather low (Kessler et al., 2005), when compared with the suicide rate in Japan (25 per 100,000 population) (World Health Organization, 2012). Another possibility is that accessibility to emergency medical services in each country might cause the differences in prevalence. In Japan, free access for ambulance services is covered by the National Health Insurance System, which enables virtually all suicide attempters to have access to emergency medicine. In addition, in Japan, the ED visit is increasingly recognized as an important setting to intervene with suicide attempters, which might affect the difference between Japan and the US.

Interestingly, our study also revealed that the pooled prevalence proportion of suicide attempters who died at the ED was 0.7% in Japan. This is the first study to report the prevalence of suicide attempters who died at the ED in Japan. The findings clearly demonstrate that ED visits for suicide attempts are relatively common and serious in Japan.

### 4.2. Psychiatric disorders in suicide attempters

It has been reported that many suicide attempters suffer from psychiatric disorders (Beautrais et al., 1996; Hawton et al., 2003). Interestingly, the present study revealed that the pooled prevalence proportion of ICD-F3 disorders (mood disorders) was 30%, and that ICD-F3 disorders were the most frequent psychiatric disorders among suicide attempters in the ED in Japan. Our findings are consistent with those of previous studies. In Sweden,

the proportion of ICD-F3 disorders was 29% (Bilén et al., 2011). The proportion of depressive disorders (ICD-9-CM code 311 only) in the US was 18% among suicide attempters in the ED (Doshi et al., 2005). Our results also revealed that the pooled prevalence proportion of mood disorders (DSM) was 35% and that mood disorders were the most common psychiatric disorders among the DSM Axis I disorders. Our findings are consistent with some previous studies using the DSM; the proportion of mood disorders reported in China was 44% in 2010 (Bi et al., 2010) and 39% in the US in 1996 (Elliott et al., 1996). In contrast, the proportion of mood disorders has been reported to be much higher in Korea (79%; Hur et al., 2008).

The current study also revealed that the pooled prevalence proportion of ICD-F4 disorders (neurotic, stress-related and somatoform disorders) was 27%, and that ICD-F4 disorders were the second most frequent psychiatric disorders among suicide attempters in the ED in Japan. The pooled prevalence proportion calculated in our study was higher than that reported in Sweden, where the prevalence was 18% among suicide attempters in the ED (Bilén et al., 2011). The pooled prevalence proportion of adjustment disorders (DSM) in Japan was 28%. Our findings were similar to the proportion (26%) in the US (Elliott et al., 1996). However, it was much higher than that reported in China (5%; Bi et al., 2010) and Korea (3%; Hur et al., 2008).

The present study found that the pooled prevalence proportion of ICD-F2 disorders (schizophrenia, schizotypal and delusional disorders) was 13% in suicide attempters in the ED in Japan. This proportion is higher than that reported in Sweden (6%; Bilén et al., 2011). On the other hand, the pooled prevalence proportion of ICD-F6 disorders (disorders of adult personality and behavior) was 13% in our study, which is lower than the 26% reported in Sweden (Bilén et al., 2011).

The pooled prevalence proportion of schizophrenia (DSM) was 19% among suicide attempters in Japanese studies, which is higher than that reported in other countries. For example, studies using the DSM have reported that the proportion of schizophrenia was 8% in China (Bi et al., 2010), 11% in Korea (Hur et al., 2008), and 5% in the US (Elliott et al., 1996) among suicide attempters in the ED.

The pooled prevalence proportion of personality disorders (DSM Axis II disorders) was 41% in studies on suicide attempters

in Japan, which is higher than that reported in other countries. The proportion of personality disorders was reported to be 1% in Korea (Hur et al., 2008), while the proportion of personality disorders (borderline personality disorder and antisocial personality disorders) was reported to be 34% in the US (Elliott et al., 1996). Care must be taken when interpreting the data in studies using the DSM because personality disorders are classified as Axis II disorders and assessed independently from Axis I disorders.

The present study found that the pooled prevalence proportion of ICD-F1 disorders (mental and behavioral disorders due to psychoactive substance use) was 4% in suicide attempters in the ED in Japan, which is lower than the 18% reported in Sweden (Bilén et al., 2011). In the US, among ICD-F1 disorders, only the prevalence for alcohol abuse (9%) was reported (Doshi et al., 2005). In contrast, the pooled prevalence proportion of substance-related disorders (DSM) was 14%. Thus, the pooled prevalence proportion calculated in our study was higher than that reported in China (3%; Bi et al., 2010). In the US, among substance-related disorders, only the prevalence for alcohol abuse or dependence (30%) and drug abuse or dependence (19%) has been reported (Elliott et al., 1996).

Most ED clinicians do not routinely assess suicidal ideation, suicidal behavior, or psychiatric disorders among their patients (Boudreaux et al., 2013) and ED assessment of self-harm was highly variable among institutions (Caterino et al., 2013). However, the NICE guidelines recommend that patients presenting at hospitals with self-harm should receive a psychosocial assessment and suicide screening before their discharge (NICE, 2004; Ting et al., 2012b). The high prevalence of psychiatric disorders in suicide attempters in the ED suggests that mental health issues should be considered during the management and disposition of these patients.

#### 4.3. Methods of suicide in suicide attempters

Poisoning was found to be the most common method of suicide, with a pooled prevalence proportion of 52%. Our findings are comparable to previous research results (Table 4) reported in the US (68%, Doshi et al., 2005; 72%, Elliott et al., 1996), Sweden (86%, Bilén et al., 2011), China (92%, Bi et al., 2010), Korea (69%, Lee et al., 2012), and the United Kingdom (78%, Bergen et al., 2010).

The second most frequent method among suicide attempters in the ED in Japan was cutting, which had a pooled prevalence proportion of 18%. Our findings are also comparable to previous findings (Table 4) reported in the US (20%, Doshi et al., 2005; 15%, Elliott et al., 1996), Sweden (12%, Bilén et al., 2011), Korea (16%, Lee et al., 2012), and the United Kingdom (15%, Bergen et al., 2010).

The study also revealed that the pooled prevalence proportion of jumping was 12% in suicide attempters in the ED in Japan. The prevalence is higher than that reported in the US (4%, Elliott et al., 1996) and Korea (3%, Lee et al., 2012). The prevalence proportion of hanging was lower (7%), which is similar to the 6% reported in Korea (Lee et al., 2012). The prevalence of hanging as a suicide method is even lower (less than 1%) in the US (Doshi et al., 2005; 2%, Elliott et al., 1996). The use of burning as a method of suicide is also less than 1% in the US (Elliott et al., 1996), whereas we found the pooled prevalence proportion of burning to be 4% in suicide attempters in the ED in Japan.

The high prevalence of poisoning in suicide attempters in the ED suggests that the ED is an appropriate setting to conduct clinical studies of suicide attempts by poisoning. It is known that suicide attempters who use poisoning as a suicide method are a high-risk group for repeated suicide attempts after discharge from the ED. For example, it was found that 12% of patients in the ED after poisoning subsequently re-attended the ED due to poisoning within one year after their discharge (Owens et al., 1994). Because there is no known effective intervention for them (Kapur et al.,

2010), it is necessary to conduct further ED research on suicide attempters who use poisoning.

## 5. Limitation

The present study has two primary limitations. First, there might be a publication bias, since our analyses only included published articles. The calculated prevalence in this study could be overestimated because these articles are published by researchers who are more concerned with suicide attempters. Second, there might be an information bias, such as reporting biases and misclassification, since most of the included studies used retrospective designs.

## 6. Conclusion

The present study was able to estimate the prevalence of suicide attempters in the ED in Japan. The results indicate that suicide attempters in the ED have a higher proportion of mood disorders, and that the most common method of suicide is poisoning.

#### Role of funding source

This study was supported by Health Labor Sciences Research Grants from the Ministry of Health Labor and Welfare. The funder had no any role in study design, data collection, data analysis and writing of the report.

#### Conflict of interest

The authors declare that they have no conflict of interests.

#### Acknowledgments

We would like to thank Ms. Mayumi Matsutani and Ms. Hiromi Muramatsu for their kind support.

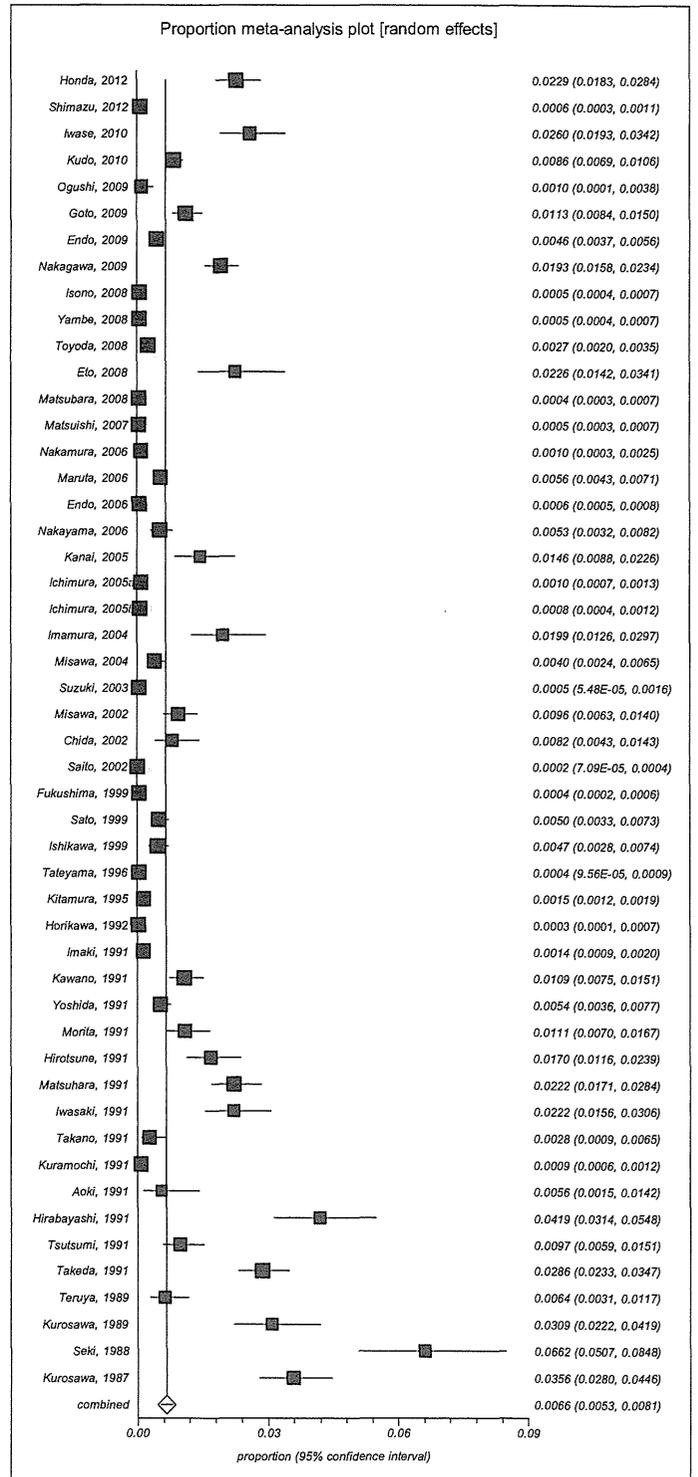
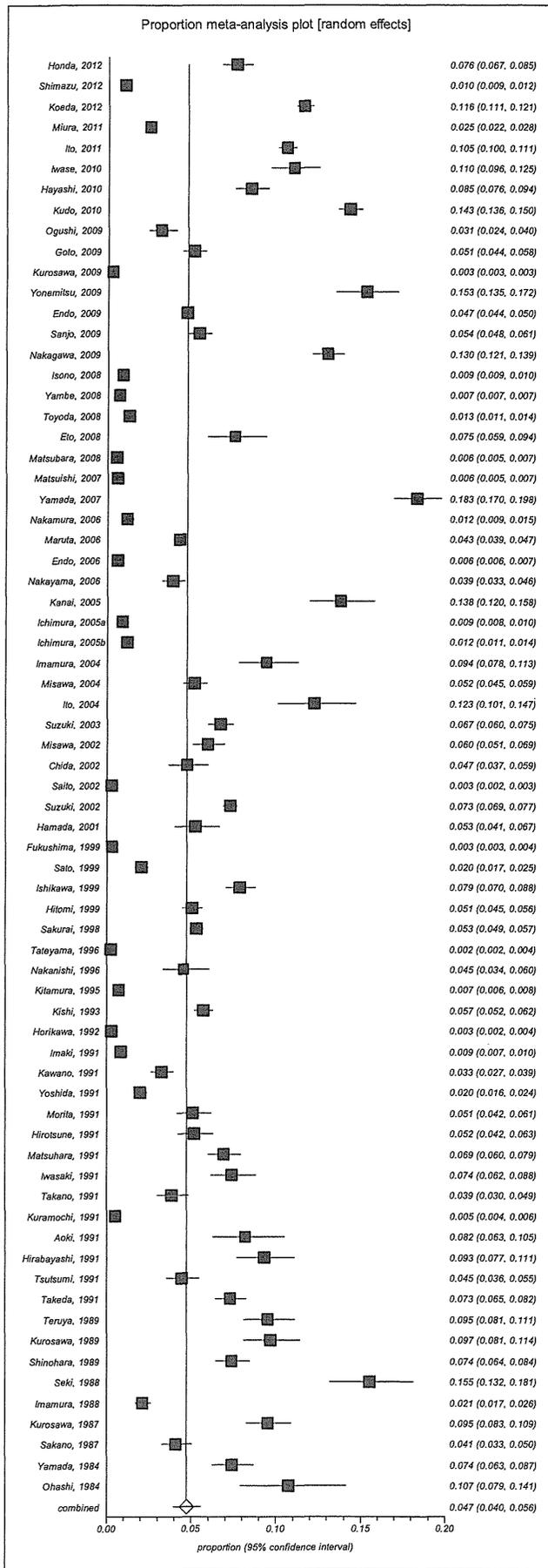
## Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at <http://dx.doi.org/10.1016/j.jad.2014.03.025>.

## References

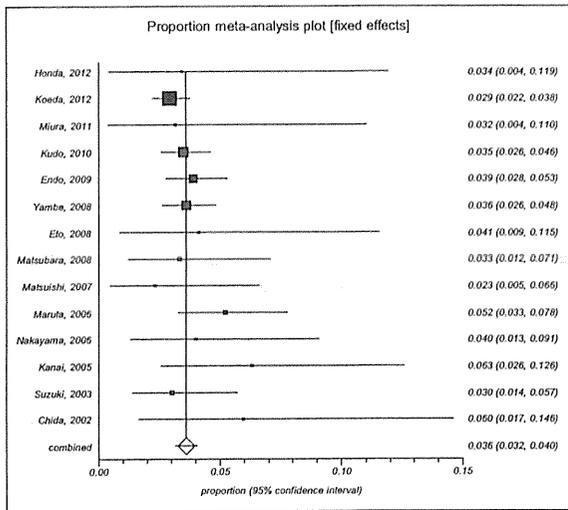
- Beautrais, A.L., Joyce, P.R., Mulder, R.T., Fergusson, D.M., Nightingale, S.K., 1996. Prevalence and comorbidity of mental disorders in persons making serious suicide attempts: a case-control study. *Am. J. Psychiatry* 153, 1009–1014.
- Beautrais, A.L., 2004. Further suicidal behavior among medically serious suicide attempters. *Suicide Life Threat Behav.* 34, 1–11.
- Bergen, H., Hawton, K., Waters, K., Cooper, J., Kapur, N., 2010. Epidemiology and trends in non-fatal self-harm in three centres in England: 2000–2007. *Br. J. Psychiatry* 197 (6), 493–498.
- Bi, B., Tong, J., Liu, L., Wei, S., Li, H., Hou, J., Tan, S., Chen, X., Chen, W., Jia, X., Liu, Y., Dong, G., Qin, X., Phillips, M.R., 2010. Comparison of patients with and without mental disorders treated for suicide attempts in the emergency departments of four general hospitals in Shenyang, China. *Gen. Hosp. Psychiatry* 32 (5), 549–555.
- Bilén, K., Ottosson, C., Castrén, M., Ponzer, S., Ursing, C., Ranta, P., Ekdahl, K., Pettersson, H., 2011. Deliberate self-harm patients in the emergency department: factors associated with repeated self-harm among 1524 patients. *Emerg. Med. J.* 28 (12), 1019–1025.
- Boudreaux, E.D., Miller, L., Goldstein, A.B., Sullivan, A.F., Allen, M.H., Manton, A.P., Arias, S.A., Camargo Jr., C.A., 2013. The emergency department safety assessment and follow-up evaluation (ED-SAFE): method and design considerations. *Contemp. Clin. Trials* 36 (1), 14–24.
- Cabinet Office, Government of Japan, 2007. General principles of suicide prevention policy. (<http://www8.cao.go.jp/jisatsutaisaku/sougou/taisaku/pdf/t.pdf>) (in Japanese).
- Cabinet Office, Government of Japan, 2012. General principles of suicide prevention policy. (<http://www8.cao.go.jp/jisatsutaisaku/taikou/pdf/20120828/honbun.pdf>) (in Japanese).
- Caterino, J.M., Sullivan, A.F., Betz, M.E., Espinola, J.A., Miller, L., Camargo Jr., C.A., Boudreaux, E.D., 2013. Emergency Department Safety Assessment and Follow-up

- Evaluation (ED-SAFE) Investigators., 2013. Evaluating current patterns of assessment for self-harm in emergency departments: a multicenter study. *Acad. Emerg. Med.* 20 (8), 807–815.
- DerSimonian, R., Laird, N., 1986. Meta-analysis in clinical trials. *Control Clin. Trials* 7, 177–187.
- Doshi, A., Boudreaux, E.D., Wang, N., Pelletier, A.J., Camargo Jr., C.A., 2005. National study of US emergency department visits for attempted suicide and self-inflicted injury, 1997–2001. *Ann. Emerg. Med.* 46 (4), 369–375.
- Ekeberg, O., Ellingsen, O., Jacobsen, D., 1991. Suicide and other causes of death in a five-year follow-up of patients treated for self-poisoning in Oslo. *Acta Psychiatr. Scand.* 83, 432–437.
- Elliott, A.J., Pages, K.P., Russo, J., Wilson, L.G., Roy-Byrne, P.P., 1996. A profile of medically serious suicide attempts. *J. Clin. Psychiatry* 57 (12), 567–571.
- Hawton, K., Houston, K., Haw, C., Townsend, E., Harriss, L., 2003. Comorbidity of axis I and axis II disorders in patients who attempted suicide. *Am. J. Psychiatry* 160, 1494–1500.
- Hawton, K., Bergen, H., Casey, D., Simkin, S., Palmer, B., Cooper, J., Kapur, N., Horrocks, J., House, A., Lilley, R., Noble, R., Owens, D., 2007. Self-harm in England: a tale of three cities. *Soc. Psychiatry Psychiatr. Epidemiol.* 42, 513–521.
- Hawton, K., Saunders, K.E., O'Connor, R.C., 2012. Self-harm and suicide in adolescents. *Lancet* 379 (9834), 2373–2382.
- Higgins, J.P., Thompson, S.G., Deeks, J.J., Altman, D.G., 2003. Measuring inconsistency in meta-analyses. *Br. Med. J.* 327, 557–560.
- Hur, J.W., Lee, B.H., Lee, S.W., Shim, S.H., Han, S.W., Kim, Y.K., 2008. Gender differences in suicidal behavior in Korea. *Psychiatry Investig.* 5 (1), 28–35.
- Isometsa, E.T., Lonnqvist, J.K., 1998. Suicide attempts preceding completed suicide. *Br. J. Psychiatry* 173, 531–535.
- Kapur, N., Cooper, J., Bennenwith, O., Gunnell, D., Hawton, K., 2010. Postcards, green cards and telephone calls: therapeutic contact with individuals following self-harm. *Br. J. Psychiatry* 197 (1), 5–7.
- Kessler, R.C., Berglund, P., Borges, G., Nock, M., Wang, P.S., 2005. Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990–1992 to 2001–2003. *JAMA* 293 (20), 2487–2495.
- Kurz, A., Moller, H.J., 1984. Help-seeking behavior and compliance of suicidal patients. *Psychiatr. Prax.* 11 (1), 6–13.
- Lee, C.A., Choi, S.C., Jung, K.Y., Cho, S.H., Lim, K.Y., Pai, K.S., Cho, J.P., 2012. Characteristics of patients who visit the emergency department with self-inflicted injury. *J. Korean Med. Sci.* 27 (3), 307–312.
- National Institute for Health and Clinical Excellence, 2004. The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care. Clinical Guideline 16, NICE.
- National Police Agency, 2012. Statistics of suicide victims in Japan in 2011. National Police Agency Japan (in Japanese).
- Nielsen, B., Wang, A.G., Brille-Brahe, U., 1990. Attempted suicide in Denmark. IV. A five-year follow-up. *Acta Psychiatr. Scand.* 81, 250–254.
- Nordstrom, P., Asberg, M., Aberg-Wistedt, A., Nordin, C., 1995. Attempted suicide predicts suicide risk in mood disorders. *Acta Psychiatr. Scand.* 92, 345–350.
- Owens, D., Dennis, M., Read, S., Davis, N., 1994. Outcome of deliberate self-poisoning. An examination of risk factors for repetition. *Br. J. Psychiatry* 165 (6), 797–801.
- Perry, I.J., Corcoran, P., Fitzgerald, A.P., Keeley, H.S., Reulbach, U., Arensman, E., 2012. The incidence and repetition of hospital-treated deliberate self harm: findings from the world's first national registry. *PLoS One* 7, e31663.
- Talor, E.A., Stansfeld, S.A., 1984. Children who poison themselves. I. A clinical comparison with psychiatric controls. *Br. J. Psychiatry* 145, 127–132.
- Ting, S.A., Sullivan, A.F., Boudreaux, E.D., Miller, I., Camargo Jr., C.A., 2012a. Trends in US emergency department visits for attempted suicide and self-inflicted injury, 1993–2008. *Gen. Hosp. Psychiatry* 24, 557–565.
- Ting, S.A., Sullivan, A.F., Miller, I., Espinola, J.A., Allen, M.H., Camargo Jr., C.A., Boudreaux, E.D., Emergency Department Safety and Follow-up Evaluation (ED-SAFE) Investigators., 2012b. Multicenter study of predictors of suicide screening in emergency departments. *Acad. Emerg. Med.* 19 (2), 239–243.
- World Health Organization, 2012. Country reports and charts available. ([http://www.who.int/mental\\_health/prevention/suicide/country\\_reports/en/index.html](http://www.who.int/mental_health/prevention/suicide/country_reports/en/index.html)).

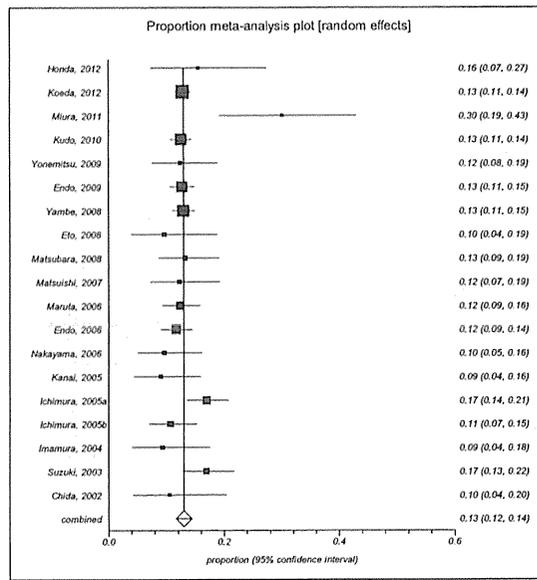


Appendix Figure. 1. Prevalence proportions of suicide attempters in the ED.

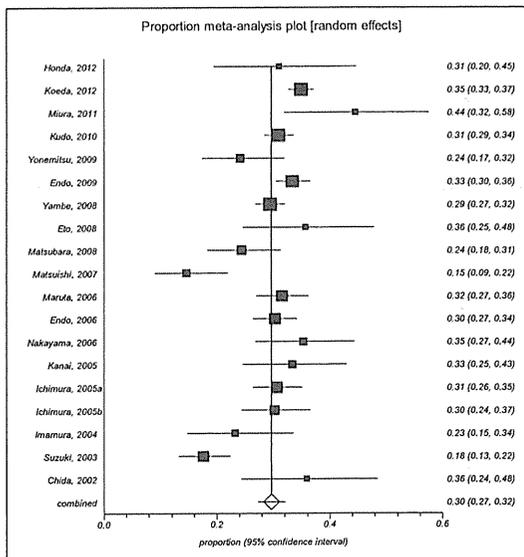
\* See Appendix List 1 for the detailed references.



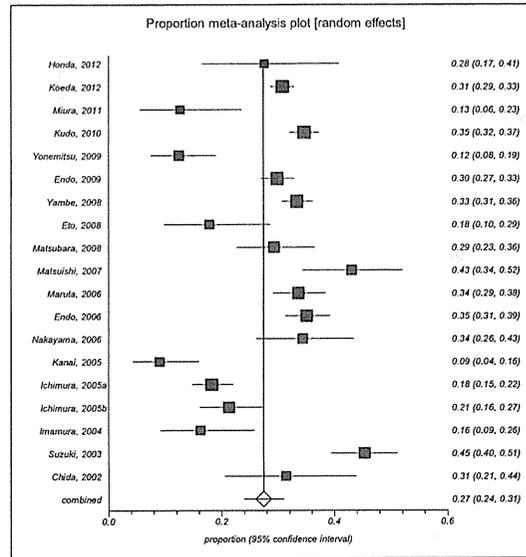
ICD-F1 disorders



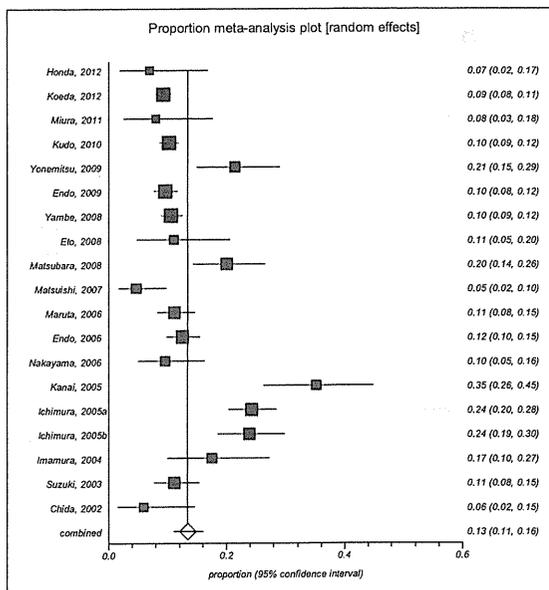
ICD-F2 disorders



ICD-F3 disorders



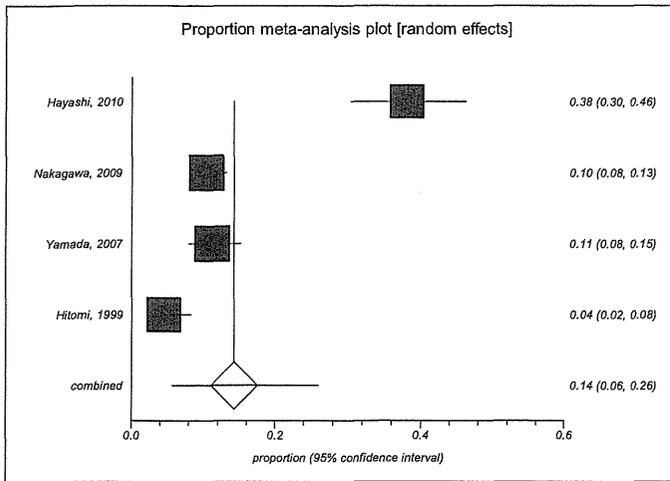
ICD-F4 disorders



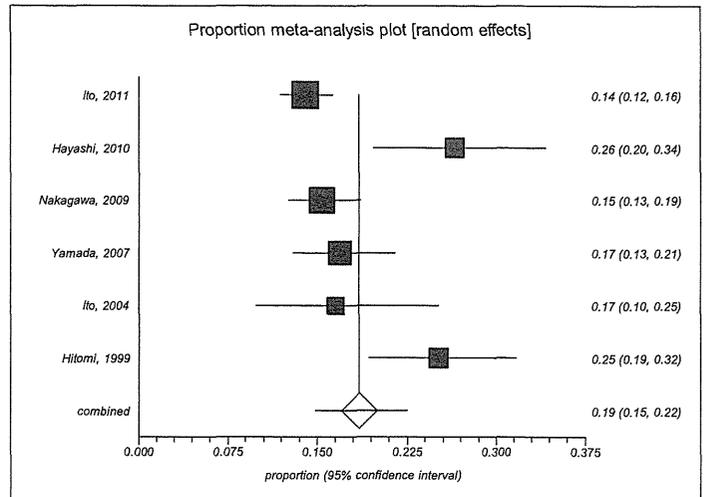
ICD-F6 disorders

Appendix Figure. 2. Prevalence proportions of ICD diagnosis in suicide attempters.

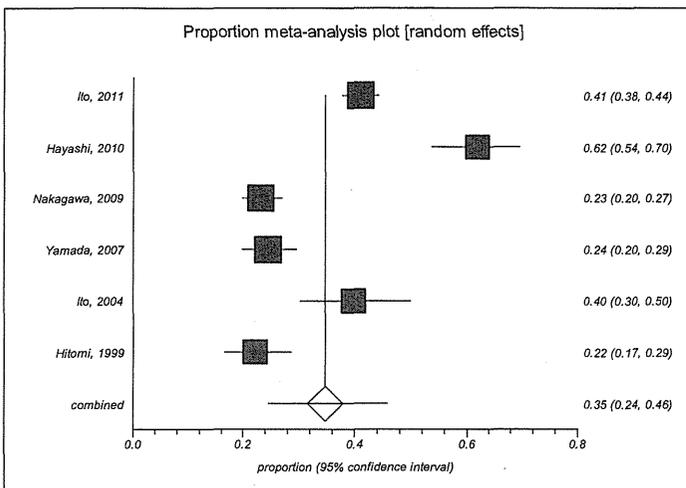
\* See Appendix List 1 for the detailed references.



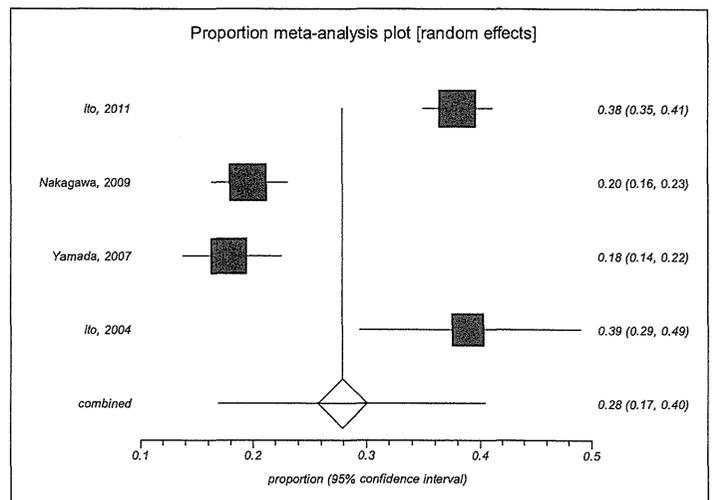
Substance-Related Disorders



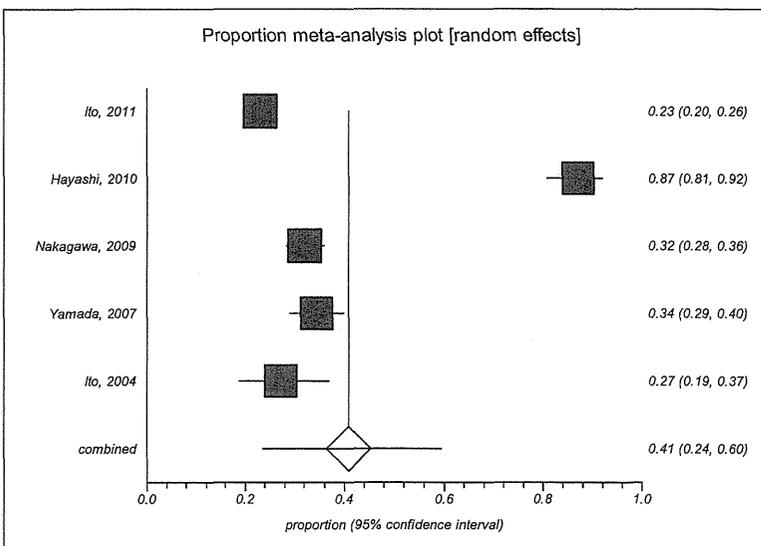
Schizophrenia



Mood disorders



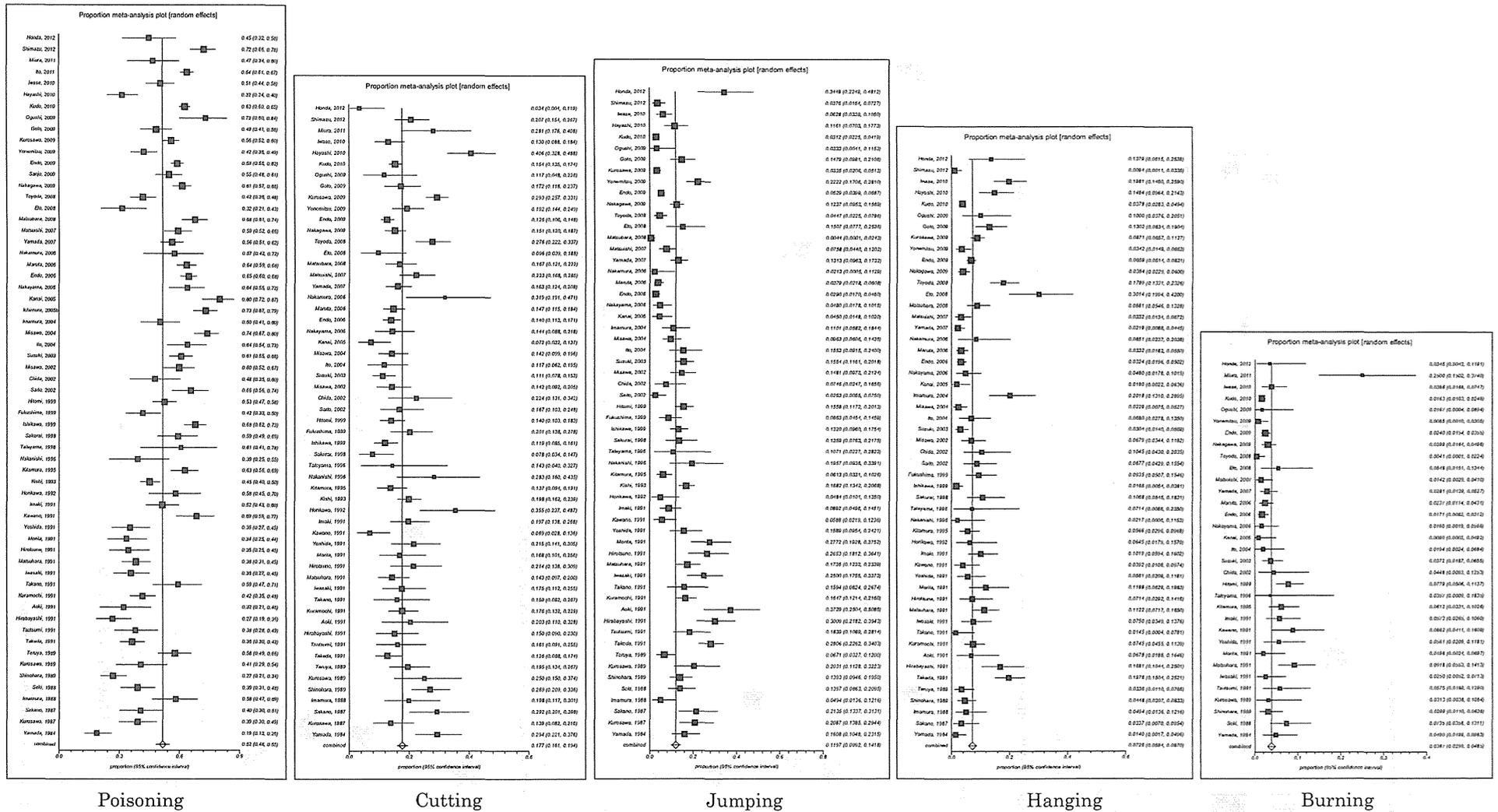
Adjustment disorders



Personality disorders

Appendix Figure. 3. Prevalence proportions of DSM diagnoses in suicide attempters.

\* See Appendix List 1 for the detailed references.



Appendix Figure. 4. Prevalence proportions of methods of suicide.

\* See Appendix List 1 for the detailed references.

## Appendix List 1

### Reference for Appendix Figures1–4 (70 studies for meta-analysis)

Aoki H, Shinohara T, Endo Y, 1991. Present situation of suicide attempters transferred to the critical care medical center of the Teikyo University Hospital. *The Japanese Journal of Acute Medicine* 15 (6):646-7. (in Japanese)

Chida F, Suzuki M, Sakai A, Inoue Y, endo S, Aoki Y, 2002. A report on the cases of suicidal act at critical care and emergency center, Iwate Medical University Hospital. *Emergency Psychiatry* 5, 79-86. (in Japanese)

Endo J, Otsuka K, Yoshida T, Nakamura H, Yambe T, Isono H, Chida F, 2009. Factors related to risk of death in those attempting suicide: Comparison between those with mild and severer physical impairment at an emergency medical center. *Emergency Psychiatry* 12, 60-73. (in Japanese)

Endo T, Otsuka K, Maruta M, Nakayama H, Endo S, 2006. A comparative study of primary and secondary unit and tertiary emergency mental health services for persons attempting suicide. *The Journal of the Iwate Medical Association* 58(2), 97-107. (in Japanese)

Eto N, Kitamura T, Tanaka K, Nishimura R, 2008. Assessment of suicidal patients admitted to the emergency and critical care center of Fukuoka University Hospital consultation-liaison service (April 2006 to March 2007). *Medical Bulletin of Fukuoka University* 35(1), 25-33. (in Japanese)

Fukushima Y, Kikuchi Y, Fujibayashi F, 1999. Attempted suicide cases in emergency center of Aomori prefectural central hospital. *Medical Journal Aomori* 44(2), 52-58. (in Japanese)

Goto Y. 2009. Relations between means of attempted suicide and psychiatric disorders. *Journal of Japanese Association for Acute Medicine* 20(11), 861-870. (in Japanese)

Hamada M, Miyata M, Uegaki F, Yamashita T, Yagi M, Iwano A, Takezaki T, 2001. The medical team approach to the suicide-attempted patients by taking drugs or chemicals –Participation of the medical social workers-. *The Japanese Journal of Clinical Toxicology* 14(2), 119-125. (in Japanese)

Hayashi N, Igarashi M, Imai A, Osawa Y, Utsumi K, Ishikawa Y, Tokunaga T, Ishimoto K, Harima H, Tatebayashi Y, Kumagai N, Nozu M, Ishii H, Okazaki Y, 2010. Psychiatric disorders and clinical correlates of suicidal patients admitted to a psychiatric hospital in Tokyo. *BMC Psychiatry* 10,

Hirabayashi N, Takahashi T, Miura S, Koike S, 1991. Present situation of suicide attempters transferred to the critical care medical department of the Tokyo Medical College Hospital. *The Japanese Journal of Acute Medicine* 15 (6):638-9. (in Japanese)

Hirotsune H, 1991. Present situation of suicide attempters transferred to the Osaka Prefecture Senri critical care medical center. *The Japanese Journal of Acute Medicine* 15 (6):634-5. (in Japanese)

Hitomi Y, 1999. Clinical characteristics and psychiatric analysis of suicidal patients admitted to Critical Care Medical Center. *Acta Medica Kinki University* 24(3-4), 73-83.

Honda Y, Eto N, Matsuo M, Kitamura T, Ishikura H, Nishimura R, 2012. The clinical characteristics of adolescent suicide attempters compared with attempters in their 20's admitted to the emergency and critical care Unit, Fukuoka University Hospital. *Japanese Bulletin of Social Psychiatry* 21(2), 156-166. (in Japanese)

Horikawa N, Yamasaki T, Hoshi M, 1992. Jisatsukito, tokushū: shinshin iryō o hitsuyō to suru *kyūkyū kanja*. *Psychosomatic Therapy* 4(7), 813-819. (in Japanese)

Ichimura A, Matsumoto H, Kimura T, Okuyama T, Watanabe T, Nakagawa Y, Yamamoto I, Inokuchi S, Hosaka T, 2005a. Changes in mental disorder distribution among suicide attempters in mid-west area of Kanagawa. *Psychiatry and Clinical Neurosciences* 59(2), 113-118.

Ichimura A, Matsumoto H, Aoki T, Andoh H, Yano H, Nakagawa Y, Yamamoto I, Inokuchi S, 2005b. Characteristics of suicide attempters with depressive disorders. *Psychiatry and clinical neurosciences* 59(5), 590-594.

Imaki S, Oohama N, Toyama K, Omiya K, Maruyama K, Nagana K, Ogawa T, Yamanaka I, 1991. Retrospective clinical analysis on the patients of suicide attempt. *Japanese Journal of Primary Care* 14(4), 521-524. (in Japanese)

Imamura W, Ueda H, Oikawa K, Mizuno Y, Yahaba H, Sakai A, Okamoto K, Mita T, Kirikae T, 1988. A study on suicide attempts by taking paraquat -Based on practice of consultation-liaison psychiatry for about three years-. *The Journal of the Iwate Medical Association* 40(3), 439-447. (in Japanese)

Imamura Y, Tateno M, Yamamoto M, Hashimoto E, Narimatsu H, Ozawa H,

Saito T, Asai Y, 2004. Study of suicidal patients at critical care and emergency center, Sapporo Medical University Hospital. *Journal of Japan Society for Critical Care Medicine* 18, 29-35. (in Japanese)

Ishikawa M, Soga Y, Yaguchi A, Suzuki T, 1999. Evaluation of suicide attempt patients at an emergency medical center in Tokyo. *J Tokyo Wom Med Univ* 69(2):39-47.

Isono H, Otsuka K, Hoshi K, Yambe T, Endo J, Nakamura H, Endo S, 2008. A comparative study between patients with mood disorder and with neurotic disorder who exhibited suicide-related behaviors. *The Journal of the Iwate Medical Association* 60(3), 151-162. (in Japanese)

Ito T, Hada M, Kimura M, Kurokawa A, Kurosawa H, Okubo Y, 2004. The study of suicidal attempt persons in a critical care medical center and their prognosis. *Clinical Psychiatry* 46(4), 389-396. (in Japanese)

Ito T, Okubo Y, 2011. Features and issues related to substance dependence of inpatients involved in suicide attempts and self-harm from the standpoint of the re-suicide prevention. *Japanese Journal of General Hospital Psychiatry* 23(3), 268-276. (in Japanese)

Iwasaki Y, 1991. Present situation of a person with intention of suicide who was admitted to the Nippon Medical School affiliated hospital lifesaving emergency center. *The Japanese Journal of Acute Medicine* 15 (6):626-7. (in Japanese)

Iwase F, Matsuda K, Kobayashi T, Miyazaki Y, Kikuchi H, Watanabe T. 2010. *Yamanashi kenritsu chūō byōin kyūmei kyūkyū sentā ni okeru jisatsu kito shōrei no kentō*. *The Journal of Yamanashi Central Hospital* 36, 34-37. (in Japanese)

Kanai R, 2005. Psychiatric examination of suicide attempters who admitted to the Teikyo University Hospital emergency unit. *Teikyo Medical Journal* 28(4), 217-228. (in Japanese)

Kishi Y, Nakamura K, Takagi H, Watanabe N, Iwasaki Y, Kurosawa H, Endo S, 1993. The suicide attempters in the critical care medical center (CCM): The follow up study of the patients transferred to the psychiatric ward. *Japanese Journal of General Hospital Psychiatry* 5(1), 31-38. (in Japanese)

Kitamura H, Hirose Y, Kumagai K, Honda T, Miida T, Honda H, 1995. Clinical study of suicide attempters visited to the critical care medical center in Niigata city general hospital. *The Medical Journal of Niigata City General*

Hospital 16(1), 27-31. (in Japanese)

Koeda A, Otsuka K, Nakamura H, Yambe T, Fukumoto K, Onuma Y, Saga Y, Yoshioka Y, Mita T, Mizugai A, Sakai A, Endo S, 2012. Characteristics of suicide attempts in patients diagnosed with schizophrenia in comparison with depression: a study of emergency room visit cases in Japan. *Schizophrenia research* 142(1-3), 31-39.

Kohno I, Kaku N, 1991. Present situation of suicide attempters transferred to the critical care medical center of the Kurume University Hospital. *The Japanese Journal of Acute Medicine* 15(6), 644-645. (in Japanese)

Kudo K, Otsuka K, Endo J, Yoshida T, Isono H, Yambe T, Nakamura H, Kawamura S, Koeda A, Yagi J, Kemuyama N, Harada H, Chida F, Endo S, Sakai A, 2010. Study of the outcome of suicide attempts: characteristics of hospitalization in a psychiatric ward group, critical care center group, and non-hospitalized group. *BMC psychiatry* 10, 4.

Kuramochi J, 1991. Present situation of suicide attempters transferred to the critical care medical center of the Tokyo metropolitan Hiroo Hospital. *The Japanese Journal of Acute Medicine* 15 (6):648-9. (in Japanese)

Kurosawa H, 1987. Mental care of suicide attempters admitted to a critical care medical center. *Japan Medical Journal* 3295, 28-32. (in Japanese)

Kurosawa H, Iwasaki Y, Endo S, 1989. Status of contractors to a life insurance in suicide attempters. Reports from a critical care medical center. *The Journal of the Association of Life Insurance Medicine of Japan* 87, 334-335. (in Japanese)

Kurosawa M, Maekawa K, Onoda T, Otsuka K, Sakai A, 2009. *Iwate-ken shitei kyūkyū kikan ni okeru jisatsu misuisha no jittai chōsa*. *Japanese Journal of Traumatic Stress* 7(2), 166-171. (in Japanese)

Maruta M, Otsuka K, Nakayama H, Endo T, Endo S, 2006. Comparison of suicide attempters by age group at Iwate Prefecture advanced emergency and critical care center. *The Journal of the Iwate Medical Association* 58(2), 119-131. (in Japanese)

Matsubara T, Kawai K, Honda M, Okamura H, Isomura S, Kaneyuki H, Houbara T, Ichiyama M, Fujimoto M, Wakabayashi Y, Watanabe Y, 2008. A report about suicidal people in emergency medical service center of Yamaguchi grand medical center. *Clinical Psychiatry* 50(4), 329-335. (in Japanese)

Matsuhara T, Shimazaki S, 1991. Present situation of suicide attempters transferred to the critical care medical center of the Kyorin University Hospital. *The Japanese Journal of Acute Medicine* 15 (6):632-3. (in Japanese)

Matsuishi K, Kitamura N, Tamiya S, Mita T, Yanai M, Ariyoshi K, Sato S, Kakimoto Y, 2007. A study of suicidal attempters and self-mutilators who are transported to the emergency medical center. *Kobe City Hospital Bulletin* 45, 9-16. (in Japanese)

Misawa H, Ito K, Kanai T, Seki Y, Kouzai K, Tayoshi S, Ishikawa K, Kato O, Kasahara T, 2002. The reality of suicidal attempters carried to an emergency room in international medical center of Japan. *Clinical Psychiatry* 44(12), 1341-1344. (in Japanese)

Misawa H, Kato O, Kasahara T, 2004. The problem of suicidal attempters over thirty carried to an emergency room. *Japanese Journal of Clinical Psychiatry* 33(11), 1493-1498. (in Japanese)

Miura S, Kamata Y, Matsuura A, Akata K, Saiga T, Sato S. 2011. *Jisatsu kito go kyūkyū byōtō eno nyūin o ete seishinka byōtō ni nyūin to natta shōrei no kentō*. *The Journal of Narita Red Cross Hospital* 13, 37-42. (in Japanese)

Morita H, Tanabe H, 1991. Present situation of suicide attempters transferred to the Osaka Prefecture Mishima Critical Care Medical Center. *The Japanese Journal of Acute Medicine* 15 (6):640-641. (in Japanese)

Nakagawa M, Kawanishi C, Yamada T, Iwamoto Y, Sato R, Hasegawa H, Morita S, Odawara T, Hirayasu Y, 2009. Characteristics of suicide attempters with family history of suicide attempt: a retrospective chart review. *BMC psychiatry* 9, 32.

Nakamura M, Ihara N, Ogino T, Hamada K, Iio Y, 2006. Analysis of suicide attempts in emergency room of Gunma University Hospital. *The Kitakanto Medical Journal* 55, 113-117. (in Japanese)

Nakanishi S, Yoshino S, Fukushima J, Honda N, Akabane Y, 1996. Actual survey of suicide attempters admitted in the third critical care medical center. *Annual Report of Osaka Medical Association* 24, 547-550. (in Japanese)

Nakayama H, Otsuka K, Sakai A, Chida F, Endo T, Maruta M, Endo J, Yambe T, Endo S, 2006. The cross-sectional survey of failed suicides in critical care center of Iwate Prefecture: suicide prevention considering outpatients' contact with medical facilities. *Clinical Psychiatry* 48(2),

119-126. (in Japanese)

Ogushi W, Kuroda K, Yamasaki S, Kenmochi I. 2009. *Kyūmei kyūkyū sentā ni okeru jisatsu kito kanja no jittai chōsa kara kyūkyū kangoshi no yakuwari ni tsuite kangaeru*. KANTO Journal of Japanese Association for Acute Medicine 30, 180-183. (in Japanese)

Ohashi N, 1984. *Jisatsu kitosha no toriatsukai*. Surgical Therapy 51, 274. (in Japanese)

Saito F, Kikuchi Y, Okamura Y, Fujibayashi F, Saito K, 2002. Attempted suicide cases in emergency center of Aomori prefectural center hospital. Medical Journal Aomori 47(3), 139-145. (in Japanese)

Sakano M, Kamijima K, Takemasa K, Nakae S, Matsuda H, 1987. Attempted suicides and mental diseases in critical care center. Journal of the Kyorin Medical Society 18(3), 437-447. (in Japanese)

Sakurai H, Tsutsumi K, Tomita Y, Murasaki M, 1998. Research into suicide attempters under psychiatric treatment at a critical and emergency center. Japanese Journal of Clinical Psychiatry 27(11), 1363-1370. (in Japanese)

Sanjo K, Takeuchi K, Nakamura H, Otsuka K, Endo S, 2009. Physical influence of psychotropic drug overdose: Study by measurement of blood drug concentrations. The Journal of the Iwate Medical Association 61(2), 69-81. (in Japanese)

Sato Y, Chiba M, Matsuura H, Saito S, 1999. *Tōin kyūmei kyūkyū gairai ni okeru jisatsu kito kanja no jōkyō*. J. Furukawa City Hosp 3(1), 39-41. (in Japanese)

Seki Y, Okada Y, Mimura K, 1988. Retrospective study on suicide. Journal of the National Defense Medical College 13(3), 155-162. (in Japanese)

Shimadzu T, Iwase M, 2012. A survey of patients who attempted suicide and were transported to an emergency medical institution in Saitama City. Japanese Journal of Public Health 59(11), 838-844. (in Japanese)

Shinohara Y, 1989. Critical care medicine and attempted suicide, from a viewpoint of general hospital psychiatry. Japanese Journal of Clinical Psychiatry 18(5), 645-652. (in Japanese)

Suzuki E, Ohtaki J, 2002. The features of the patients attempted suicide taking medicines in the trauma and critical care center. Journal of Japan Academy of Psychiatric and Mental Health Nursing 11(1), 65-70. (in

Japanese)

Suzuki H, Kimura M, Takezawa K, Mori T, Kurosawa H, Endo S, 2003. Yamamoto Y. Importance of continued psychiatric treatment after suicide attempt. *Journal of Japanese Association for Acute Medicine* 14(3), 145-152. (in Japanese)

Takano A, 1991. Present situation of suicide attempters transferred to the critical care medical center of the public Showa Hospital. *The Japanese Journal of Acute Medicine* 15 (6):636-7. (in Japanese)

Takeda R, Onaya M, Takagi S, Narita Y, Ishikawa S, Kubochi K, Ichikizaki K, 1991. Present situation of suicide attempters transferred to the critical care medical center of the national Tokyo Dai-ni hospital. *The Japanese Journal of Acute Medicine* 15 (6):630-631. (in Japanese)

Tateyama K, Shibata H, Fukushima Y, Kikuchi Y, 1996. States of conamen person carried in lifesaving emergency center, hospital concerned in fiscal 1995. *Medical Journal Aomori* 41(3), 105-107. (in Japanese)

Teruya K, Suzuki T, Nakagawa T, Ishikawa M, Sonoda Y, Hamano K, Yoshimasu K, Iwai K, 1989. Psychiatric problems in emergency medical centers. Attempt of suicide. *KANTO Journal of Japanese Association for Acute Medicine* 10(2), 616-617. (in Japanese)

Toyoda Y, Nakayama A, Fujiwara H, Sana K, Matsuo Y, Tanaka H, Takatorige T, Iso H, 2008. Characteristics of suicides according to prehospital records in Kishiwada city, Osaka Prefecture. *Japanese Journal of Public Health* 55(4), 247-253. (in Japanese)

Tsutsumi K, 1991. Present situation of the suicide attempter transferred to the critical care medical center of the Kitasato University Hospital. *The Japanese Journal of Acute Medicine* 15 (6):628-9. (in Japanese)

Yamada K, 1984. *Kuritikaru kea de no jisatsu misuisha no jittai to sono taiō*. *Japanese Journal of Clinical Psychiatry* 13(4), 397-403. (in Japanese)

Yamada T, Kawanishi C, Hasegawa H, Sato R, Konishi A, Kato D, Furuno T, Kishida I, Odawara T, Sugiyama M, Hirayasu Y, 2007. Psychiatric assessment of suicide attempters in Japan: a pilot study at a critical emergency unit in an urban area. *BMC psychiatry* 7, 64.

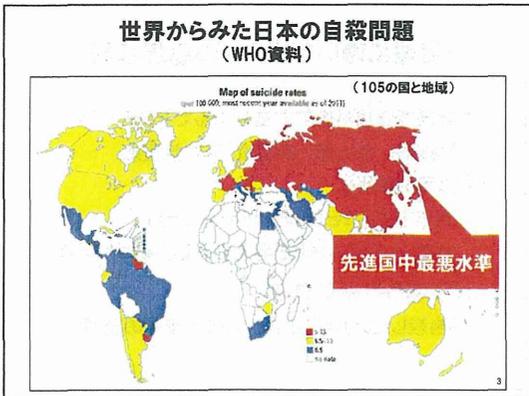
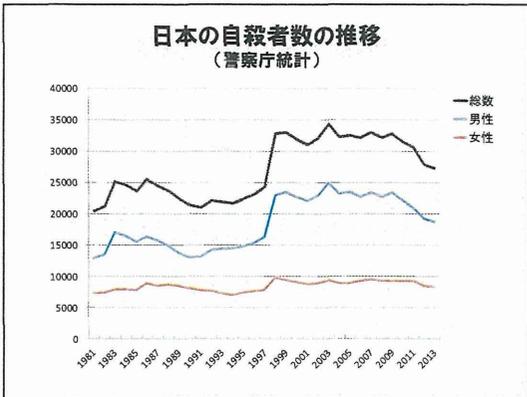
Yambe T, Otsuka K, Hoshi K, Isono H, Endo J, Nakamura H, Endo S, 2008. Comparison of suicidal persons by gender and age group. *The Journal of the Iwate Medical Association* 60(2), 89-103. (in Japanese)

Yonemitsu K, Ogawa T, Shimahara Y, Wakai T, Maeno Y, Ohnishi M, Haku K, Nishino M, Kinoshita Y, Sadamitsu D, 2009. *Kyūmei kyūkyū sentā ni okeru jisatsu kitosha eno seishinka teki taiō no mondai ten –shudan betsu rinshō chōsa yori–*. Journal of Japanese Society for Emergency Medicine 12(4), 437-442. (in Japanese)

Yoshida M, Kaneko M, 1991. Present situation of suicide attempter transferred to the critical care medical department of the Sapporo Medical College. The Japanese Journal of Acute Medicine 15 (6):642-3. (in Japanese)

## 自殺予防と自殺未遂者ケア

日本自殺予防学会/国際自殺予防学会  
 日本うつ病学会  
 ACTION-J GROUP  
 横浜市立大学医学群健康増進科学  
 河西千秋

### 日本人の死因(平成24年, 人口動態統計)

世代	1位	2位	3位
10代	自殺	不慮の事故	がん
20代	自殺	不慮の事故	がん
30代	自殺	がん	不慮の事故
40代	がん	自殺	心疾患
50代	がん	心疾患	自殺

自殺は日本人の死因全体の第7位  
腎不全や肝疾患による死亡よりも多い

### 自殺のリスク因子 (Otsuka & Kawanishi, 2013)

【表出】絶望感, 無力感, 自殺(希死)念慮

【出来事】離別・死別, 喪失, 経済的破綻, 災害・犯罪・虐待などによる外傷体験, 親族の自殺

【健康面】精神疾患, 慢性・進行性の疾患・疼痛病苦, アルコールなどの乱用, セルフ・ケアの欠如

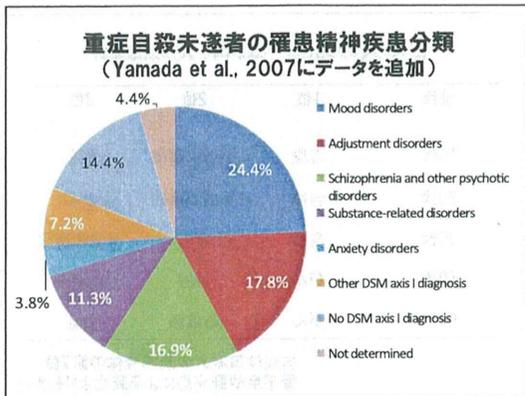
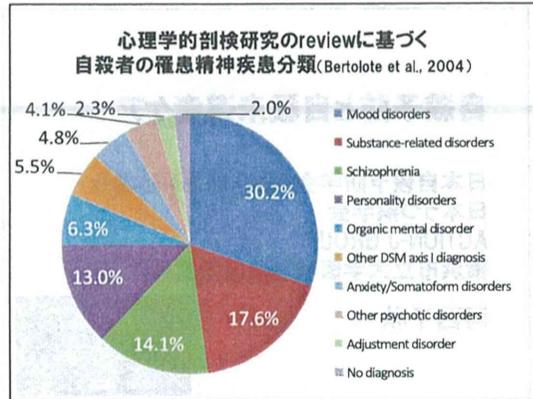
【既往】自殺未遂, 自傷行為

【環境】孤立・支援者の不在, 自殺手段を利用しやすい環境, 自殺を促す情報への曝露

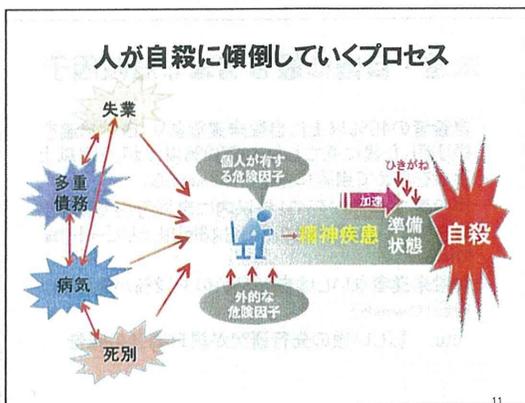
### 未遂・自傷は最も明確な危険因子

- ・ 自殺者の40%以上に自殺未遂歴あり, 自殺未遂を繰り返した後に死亡した人の80%以上が、2回以上手段を変えて自殺に至った(Isometsäら)
- ・ 自殺者の43%が死の1年以内に自損行為で救急医療を受診し、そのうちの28%は3回以上リポート(Da Cruzら)
- ・ 自殺未遂者ないしは自傷患者の3-12%がその後に自殺(Owensら)

etc... 夥しい数の先行研究が異口同音の報告



- ### 自殺に傾いている人の心理状態
- 自己価値観が低下 (“自分なんてどうせ…”) 絶望感、無力感、孤独感、孤立無援感
  - 思考が硬直化 「自殺をすること (= 終わらせること)」が唯一の解決法だと考えている (「死にたい」) (「こころの視野狭窄」)
  - 「自殺したい」⇔「生きたい」の正反対の願望
- 10



- ### 年表:近年の自殺予防対策
- 1998年:自殺が激増
  - 2006年:自殺対策基本法施行  
:自殺対策のための戦略研ACTION-Jの開始
  - 2007年:自殺総合対策大綱閣議決定
  - 2008年:自殺関連行動に関する診療報酬項目の設定  
:厚労省主催研修会の開始

**自殺総合対策大綱：9つの重点施策（2012年8月改訂）**

<p><b>自殺の実態の解明</b></p> <ul style="list-style-type: none"> <li>● 実態解明のための調査</li> <li>● 情報提供体制の充実</li> <li>● 自殺未遂者・遺族の早期発見</li> <li>● 児童・生徒の自殺予防のための調査</li> <li>● 精神疾患の診断・治療・治療法の開発</li> <li>● 既存資料の活用促進</li> </ul>	<p><b>国民の気づきと見守り</b></p> <ul style="list-style-type: none"> <li>● 自殺予防週間、対策強化月間の設定</li> <li>● 児童・生徒の自殺予防のための啓発</li> <li>● つづみに関する啓発</li> <li>● 自殺・自殺関連事象に関する正しい知識の普及</li> </ul>	<p><b>ゲートキーパーの養成</b></p> <ul style="list-style-type: none"> <li>● 自殺予防に関する職員の研修・指導体制向上</li> <li>● 自殺予防に関する職員の養成・研修体制向上</li> <li>● 自殺予防に関する職員の養成・研修体制向上</li> <li>● 自殺予防に関する職員の養成・研修体制向上</li> <li>● 自殺予防に関する職員の養成・研修体制向上</li> </ul>
<p><b>こころの健康づくり</b></p> <ul style="list-style-type: none"> <li>● 地域のメンタルヘルス対策推進</li> <li>● 地域のメンタルヘルス推進体制の整備</li> <li>● 学校におけるメンタルヘルス推進体制の整備</li> <li>● 被災者の心のケア、生活再建の推進</li> </ul>	<p><b>適切な精神科医療導入</b></p> <ul style="list-style-type: none"> <li>● 精神科医療を支える人材の養成と精神科医療体制の充実</li> <li>● つづみの発症事例向上</li> <li>● 地域に即したつづみ等の診断・治療体制の向上</li> <li>● 子どもの心の健康増進の推進</li> <li>● つづみ以外の精神疾患対象者の推進</li> <li>● 自殺関連事象等の支援</li> </ul>	<p><b>社会的な取り組み</b></p> <ul style="list-style-type: none"> <li>● 自殺予防に関する職員の養成・研修体制向上</li> <li>● 自殺予防に関する職員の養成・研修体制向上</li> <li>● 自殺予防に関する職員の養成・研修体制向上</li> <li>● 自殺予防に関する職員の養成・研修体制向上</li> <li>● 自殺予防に関する職員の養成・研修体制向上</li> </ul>
<p><b>自殺未遂者の再発防止</b></p> <ul style="list-style-type: none"> <li>● 救急医療における精神科診療体制の充実</li> <li>● 家族等の見守りへの支援</li> </ul>	<p><b>遭われた人の苦痛緩和</b></p> <ul style="list-style-type: none"> <li>● 自助グループ支援</li> <li>● 学校・職場での事後対応の促進</li> <li>● 遺族支援の情報提供の促進</li> <li>● 遺児へのケアの充実</li> </ul>	<p><b>民間団体との連携</b></p> <ul style="list-style-type: none"> <li>● 民間団体の人材育成支援</li> <li>● 公民の連携体制の確立</li> <li>● 民間の電話相談事業への支援</li> <li>● 先発的・試行的取り組みに対する支援</li> </ul>

**自殺対策の基本概念（疾病予防の概念との比較）**

	疾病の予防	自殺の予防
1次予防	未然に防ぐ ⇒	<b>未然に防ぐ：prevention</b> ：住民への啓発 ：社会各領域への啓発 ：専門職への教育
2次予防	治療 ⇒	<b>介入：intervention</b> ：ハイリスク者のスクリーニング ハイリスク群への危機介入（未遂者への介入）
3次予防	リハビリ ⇒ 再発予防	<b>事後対応：postvention</b> ：心理学的剖検 ：遭された人のケア ：群発の予防

**自殺未遂者は地下に潜っている**

- ・ 自傷・自殺企図者のほとんどは医療機関に現れない(Hawtonら)
- ・ 単に「切る」ことだけでなく、切った後に適切な処置をせずに、傷を感染の危険にさらすことを含めて「自傷」(Walsh)

どうすればよいのか？

- 地域自殺対策の推進(地域での気づき・対応)
- 救急医療を受療してくれたなら、チャンスを逃さず適切に介入

**救命救急センターは自殺予防対策の要衝**

- ・ 救命救急センターにおける自殺未遂者との出会いは**一期一会**、またとない機会  
(必ずしも未遂者は受診をしないが、3次救急側から見れば、搬送者の**10%**前後は自損行為)
- ・ 未遂者への**初期対応**が、その後の未遂者の転帰・予後に影響する



**どのような介入が有効なのか？**  
(検討されてきたもの)

入院中  
and/or 退院後の

- 電話
- 手紙・はがき
- 精神療法
- 心理教育／フォロー・アップ／アウトリーチ



横浜市大における自殺未遂者全例介入  
@高度救命救急センター 2003-現在

ケース・マネジメント介入

危機介入	精神医学的/心理社会的評価	心理教育 精神疾患 自殺企図	精神科治療 ソーシャルワーク
------	---------------	----------------------	-------------------

